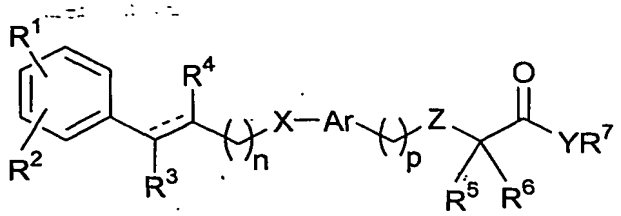
We claim:

1. A compound of formula (I),



(I)

wherein R^1 and R^2 may be same or different and independently represent hydrogen, halogen, nitro, cyano, amino, hydroxy or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, alkylcarbonyl, alkoxycarbonyl, arylcarbonyl, aryloxycarbonyl, aralkoxycarbonyl, heteroarylcarbonyl, aryloxy, aralkoxy, alkylcarbonyloxy, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, heteroarylcarbonylamino, heteroaryl, heteroaralkyl, heterocyclyl, heteroaralkoxy, heteroaryloxy, fluorenylmethoxycarbonyl (Fmoc), fluorenylmethoxycarbonylamino (N-Fmoc), $-OSO_2R^8$, $-OCONR^8R^9$, NR^8COOR^9, $-NR^8COR^9$, $-NR^8R^9$, $-NR^8SO_2R^9$, $-NR^8CONR^9R^{10}$, $-NR^8CSNR^8R^9$, $-SO_2R^8$, $-SOR^8$, $-SR^8$, $-SO_2NR^8R^9$, $-SO_2OR^8$, $-CONR^8R^9$, $-COOR^9$ or $-COR^9$, wherein R^8, R^9 and R^{10} may be same or different and independently represent hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, aryloxy or heteroaryl; or R^1 and R^2 together represent a monocyclic or polycyclic aromatic or non aromatic ring or an aromatic ring fused to a non aromatic ring, which may optionally contain 1 to 3 heteroatoms selected from N, S, or O and may be unsubstituted or have 1 to 4 substituents which may be identical or different.

R^3 and R^4 may be same or different and independently represent hydrogen, halogen, optionally substituted group selected from alkyl, cycloalkyl, alkanoyl, aryl, aroyl, aralkyl or aralkanoyl group. 'n' and 'p' independently represents 0-6.

X represents O, S, NR where R represents hydrogen or optionally substituted groupsselected from alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, alkanoyl, or aroyl.

Ar represents optionally substituted single or fused aromatic, heteroaromatic or heterocyclic group.

Z represents O, S, NR where R is as defined above.

R^5, R^6 and R^7 may be same or different and independently represent hydrogen, hydroxy, halogen or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, heteroaryl, heterocyclyl or heteroaralkyl groups. R^5 and R^6 together may form a 5

or 6 membered cyclic rings, which may contain one or two hetero atoms selected from O, S or N.

Y represents O or NR^{11} where R^{11} represents hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclyl or heteroaryl.

R^7 and R^{11} together may also form a 5 or 6 membered cyclic ring, which may contain one or two hetero atoms selected from O, S or N.

'----' represents a bond or no bond; their stereoisomers, pharmaceutically acceptable salts thereof as well as pharmaceutical compositions containing them;

When the fused rings formed by R^1 and R^2 are substituted, the substituents are selected from alkyl, halogen, hydroxy, haloalkyl, nitro, amino, cyano, oxo, or thioxo.

When the groups represented by R^1 and R^2 are substituted, the substituents are selected from halogen, hydroxy, nitro, amino, oxo, thioxo, optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, alkylsulfonyl, alkylsulinyl, alkylsulfanyl, alkylsulfonyloxy, alkylsulfinyloxy or alkylsulfanyloxy, the substituents are selected from halogen, hydroxyl, nitro, amino, cyano or alkyl.

When the groups represented by R, R^3, R^4 and R^{11} are substituted, the substituents are selected from halogen, nitro, amino, hydroxy, alkyl, oxo or aralkyl

When the groups represented by R^5, R^6 and R^7 are substituted, the substitutents are selected from halogen, hydroxy, nitro, alkyl, cycloalkyl, alkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl or amino.

When the cyclic rings formed by R^5 and R^6 are substituted, the substituents are selected from alkyl, halogen, hydroxy, haloalkyl, nitro, amino, cyano, oxo, or thioxo.

The groups defined for R, R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10} and R^{11} may be unsubstiuted, or have 1 to 4 substituents, which may be identical or different.

2. The compound of claim 1, wherein the stereoisomer is enantiomer and/or gcometrical isomer.

3. The compound of claim 1 wherein 'Ar' is optionally substituted groups selected from phenylene, naphthylene, pyridyl, quinolinyl, benzofuryl, dihydrobenzofuryl, benzopyranyl, dihydrobenzopyranyl, indolyl, indolinyl, azaindolyl, azaindolinyl, pyrazolyl, benzothiazolyl or benzoxazolyl.. The substituents on the group represented by 'Ar 'may be selected from linear or branched optionally halogenated (C_1-C_{10})alkyl, optionally halogenated (C_1-C_{10})alkoxy, halogen, acyl, amino, acylamino, thio or carboxylic or sulfonic acids and their derivatives, which may optionally be susbstituted.

4. The compound of claim 1 wherein 'Ar' is optionally substituted phenylene, naphthylene, benzofuryl, indolyl, indolinyl, quinolinyl, azaindolyl, azaindolinyl, benzothiazolyl or benzoxazolyl groups.

5. The compound of claim 1 wherein 'Ar' is phenylene, naphthylene or benzofuryl, which may be unsubstituted or substituted by alkyl, haloalkyl, methoxy or haloalkoxy groups.

6. The compound of claim 1 wherein

R^1 and R^2 are same or different and independently represent hydrogen, halogen, nitro, cyano, amino, hydroxy or optionally substituted groups selected from alkyl, alkoxy, aryl, aralkyl, aralkoxy, heteroaryl, heteroaralkoxy, $-OSO_2R^8$, $-SO_2R^8$ or $-NR^8R^9$;

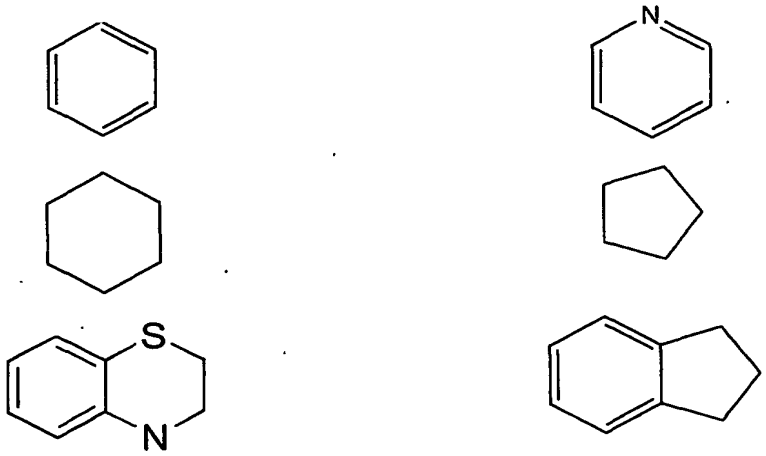
R^3 and R^4 are same or different and independently represent hydrogen, halogen, optionally substituted group selected from alkyl or aralkyl;

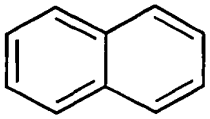
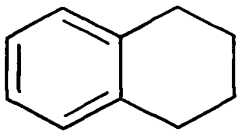
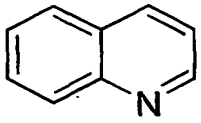
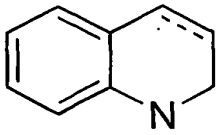
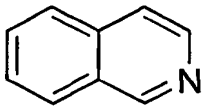
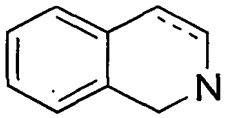
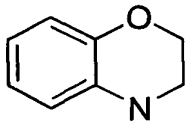
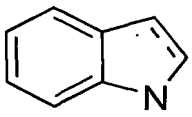
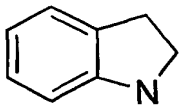
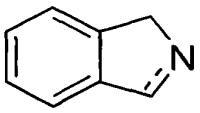
R^5 and R^6 are same or different and independently represent hydrogen, hydroxy, optionally substituted alkyl, cycloalkyl, aryl or R^5 and R^6 together represent a 5 or 6 membered aromatic or non aromatic cyclic ring system optionally containing 1 or 2 heteroatoms selected from O, S or N;

R^7 and R^{11} may form a cyclic ring system selected from pyrrolidinyl, piperidinyl, morpholinyl, piperazinyl, oxazolinyl, diazolinyl and the like.

7. The compound of claim 1 wherein

R^1 and R^2 together represent a optionally susbstituted monocyclic or polycyclic aromatic or non aromatic ring or an aromatic ring fused to a non aromatic ring selected from:



8. The compound of claim 1 wherein:

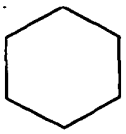
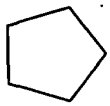
R^1 and R^2 are same or different and independently represent hydrogen, halogen, nitro, amino, hydroxy or optionally substituted group selected from alkyl, aryl, aralkyl, aralkoxy, heteroaryl, heteroaralkoxy or $-OSO_2R^8$;

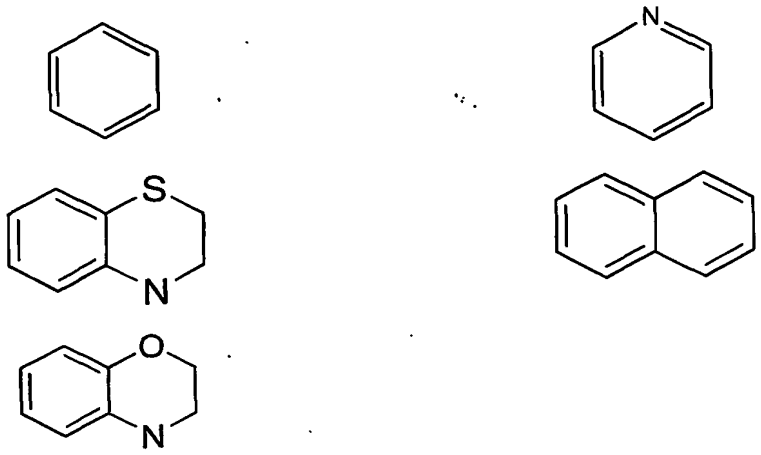
R^3 and R^4 are same or different and independently represent hydrogen or optionally substituted alkyl;

R^5 and R^6 are same or different and independently represent hydrogen, optionally substituted alkyl, cycloalkyl, aryl or R^5 and R^6 together represent a optionally substituted 5 or 6 membered saturated cyclic ring system

9. The compound of claim 1 wherein:

R^1 and R^2 together represent a optionally susbstituted monocyclic or polycyclic aromatic or non aromatic ring or an aromatic ring fused to a non aromatic ring selected from:



R^3 and R^4 are same or different and independently represent hydrogen or optionally substituted alkyl;

R^5 and R^6 are same or different and independently represent hydrogen, optionally substituted group selected from alkyl, cycloalkyl, aryl or R^5 and R^6 together represent a 5 or 6 membered saturated cyclic ring system;

10. The compound of claim 1 wherein

R^1 is selected from $-OSO_2CH_3$, halogen, alkyl optionally substituted phenyl wherein the substituent is selected from alkyl or halogen

R^2, R^3, R^4, R^5, R^6 and R^7 are same or different and independently represent hydrogen, methyl, ethyl or propyl

'Ar' represents optionally substituted phenyl wherein the substituent is alkyl

X, Y and Z independently represent oxygen

n and p independently represent 0 or 1

11. The compound of claim 1 wherein

R^1 is selected from optionally substituted phenyl wherein the substituent is selected from halogen

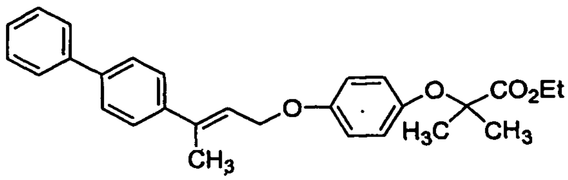
R^2, R^3, R^4, R^5, R^6 and R^7 are same or different and independently represent hydrogen, methyl, ethyl or propyl

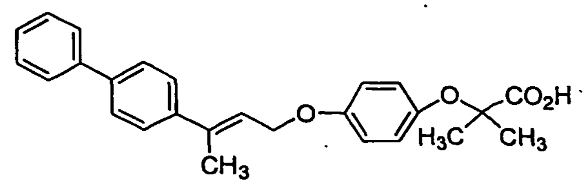
'Ar' represents optionally substituted phenyl wherein the substituent is alkyl

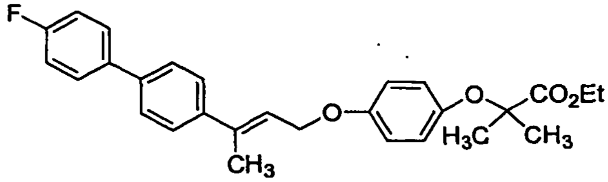
X, Y and Z independently represent oxygen

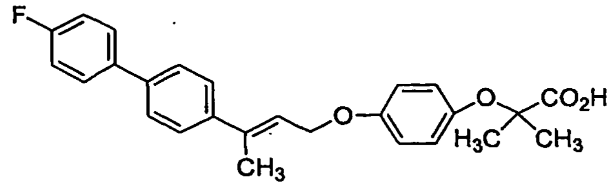
n and p independently represent 0 or 1

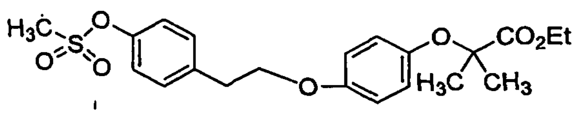
12. The compound of formula (I) as claimed in claim 1 is selected from:

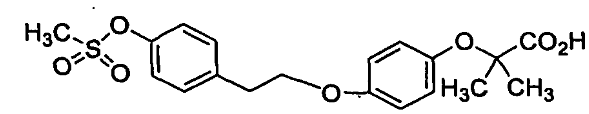


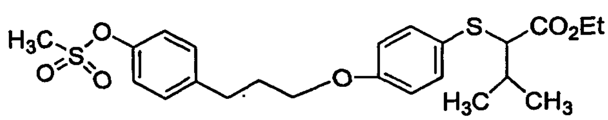


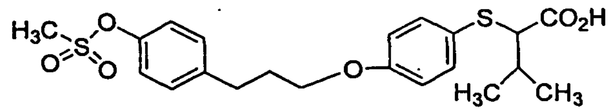


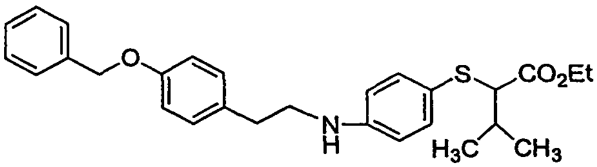


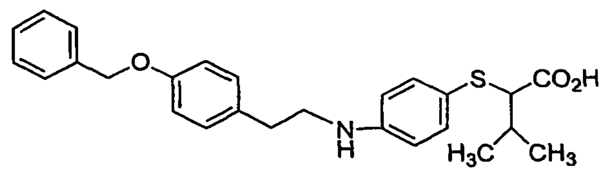


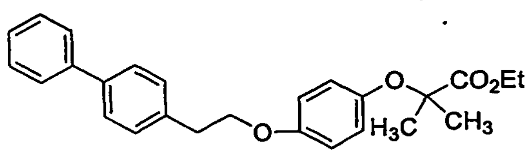


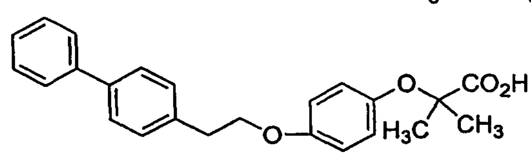


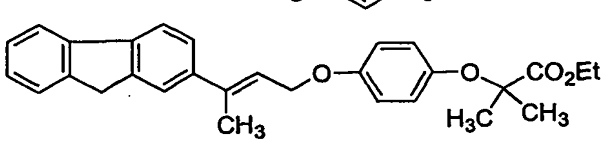


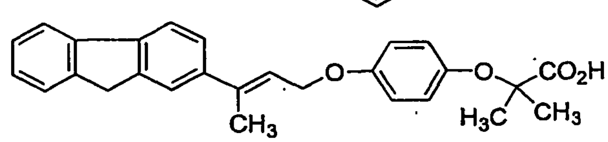


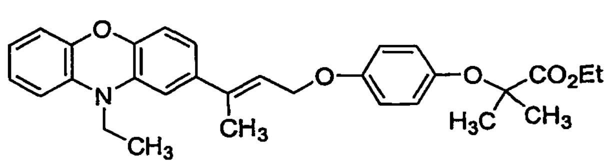


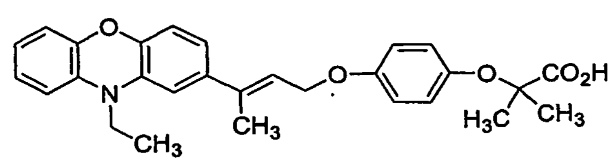


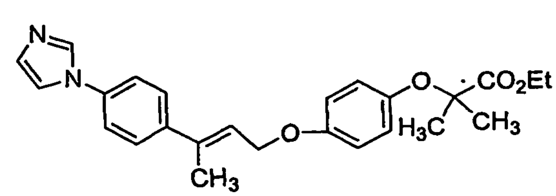


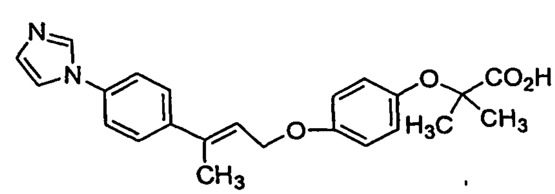


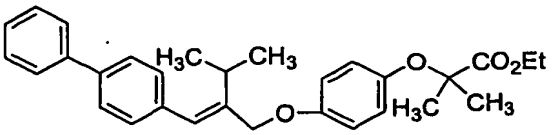


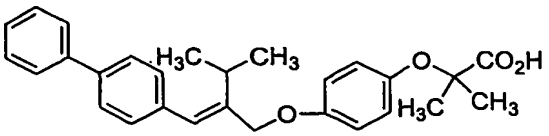


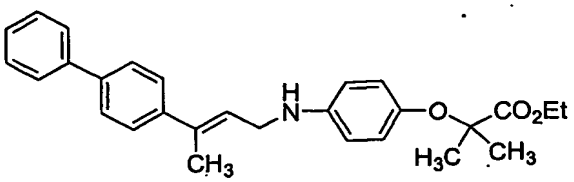


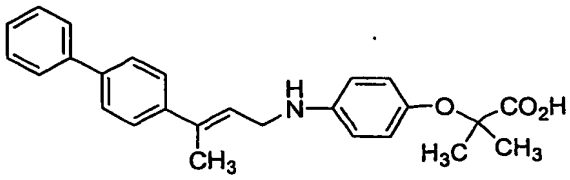


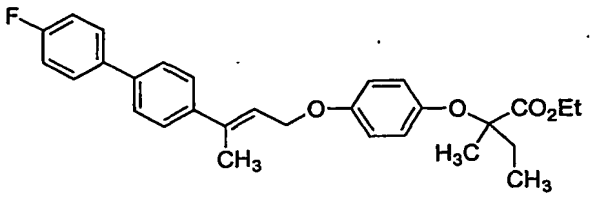


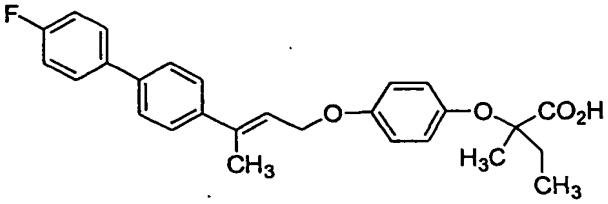


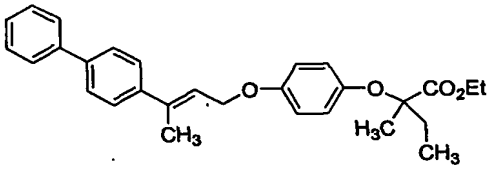


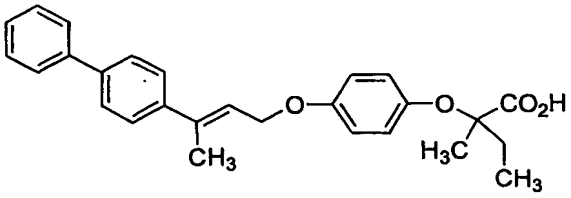


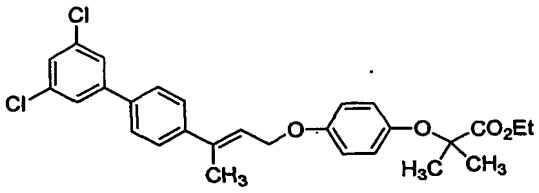


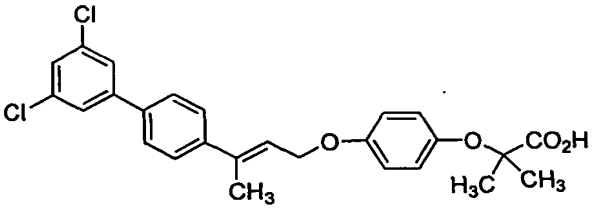


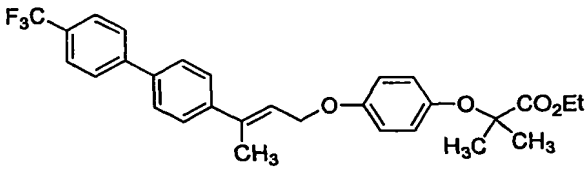


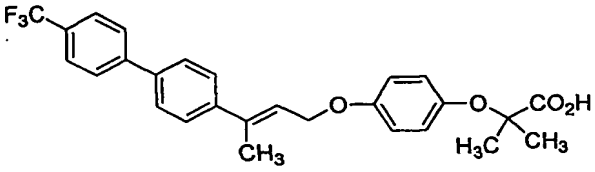


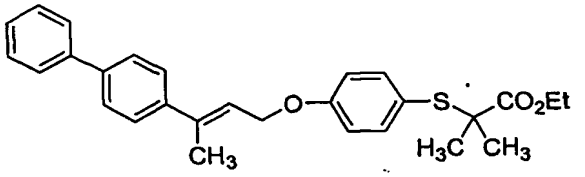


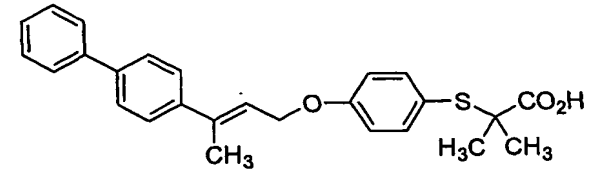


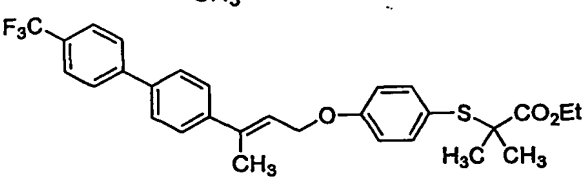


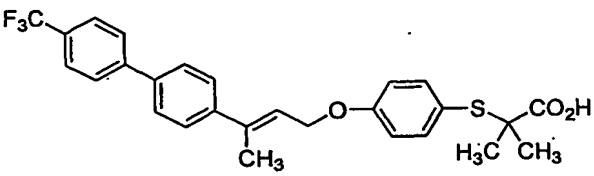


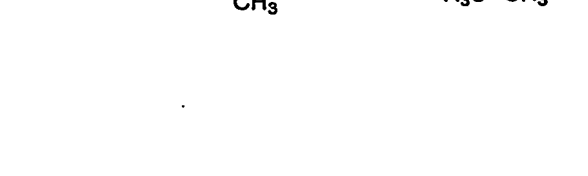


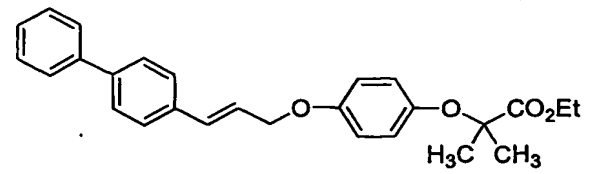
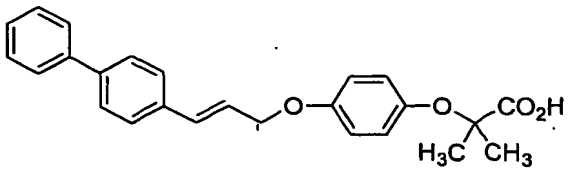
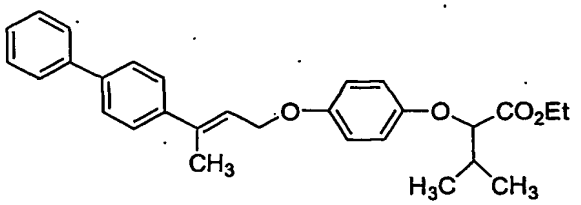
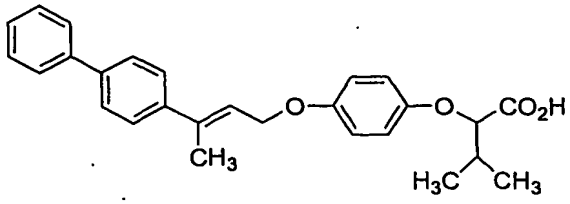
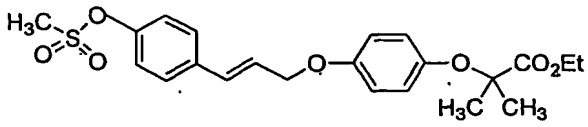
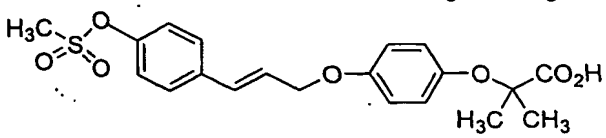
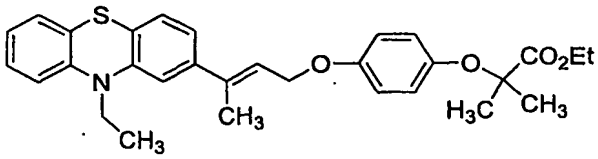
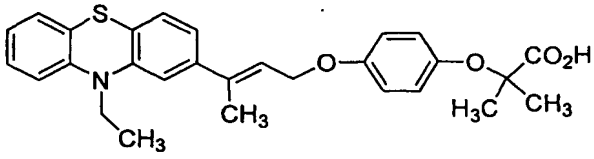
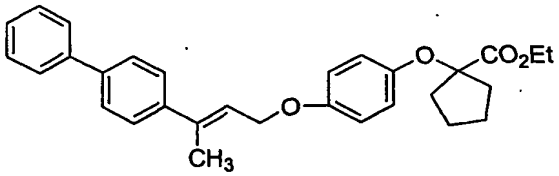
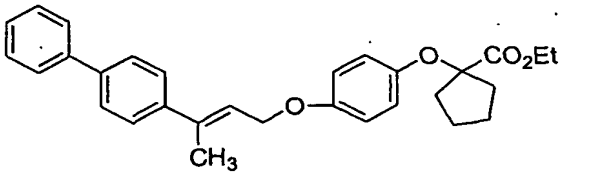
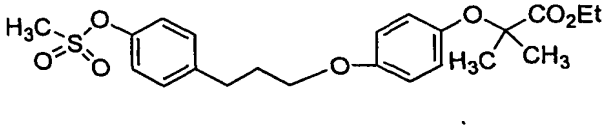
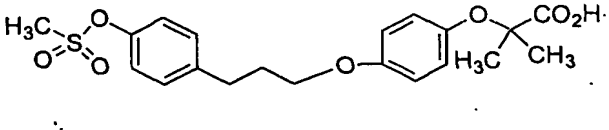
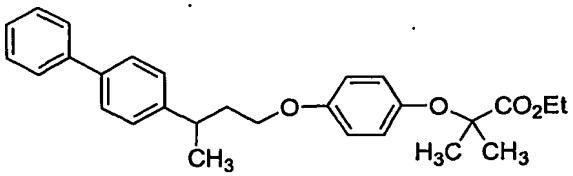
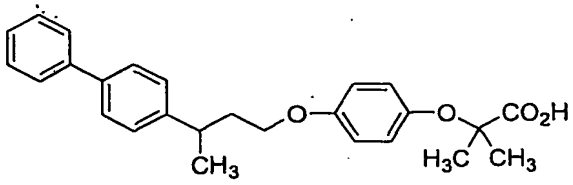




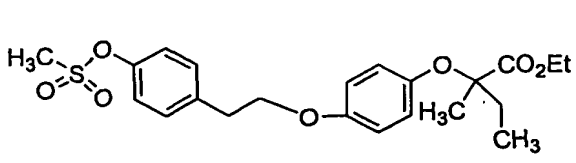
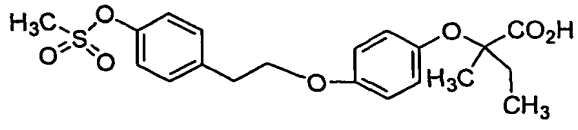


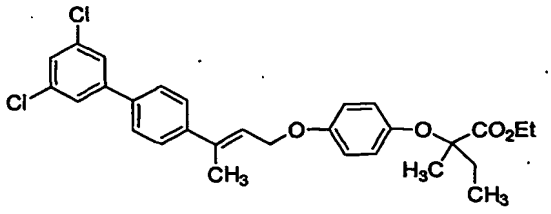
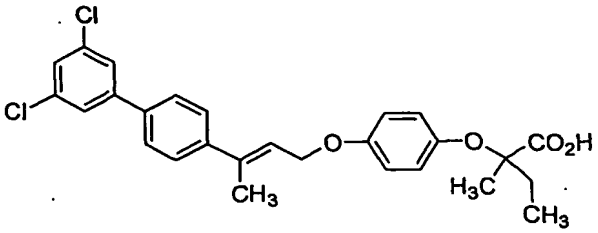
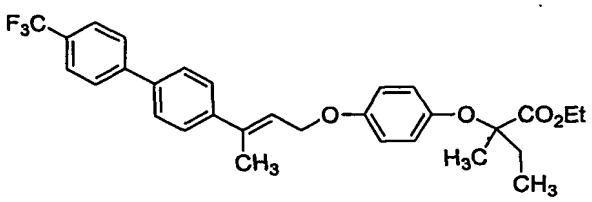
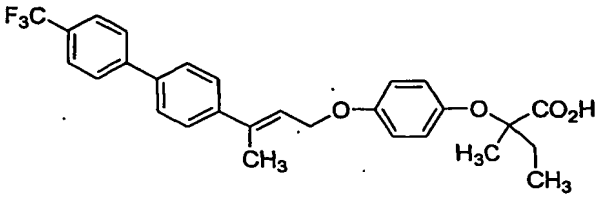
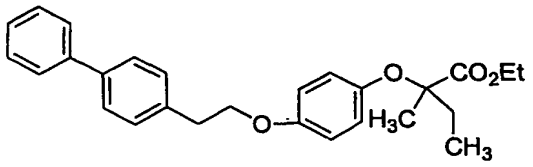
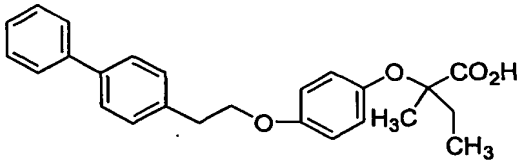
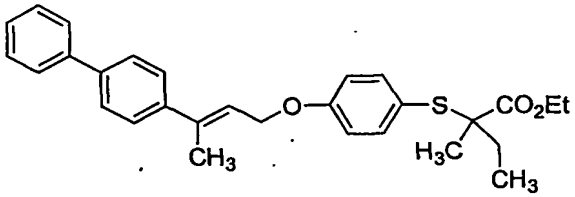
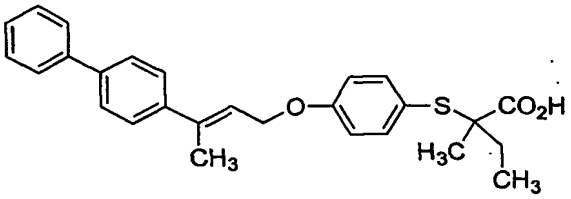
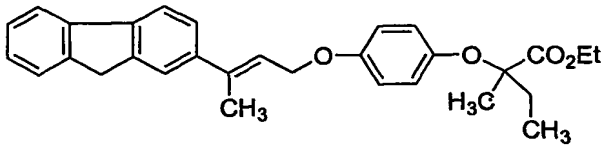
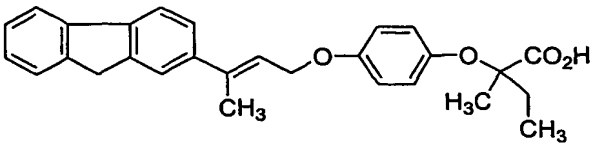
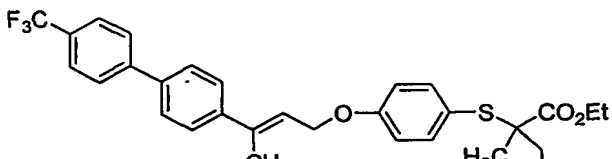
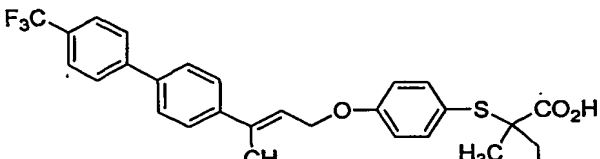
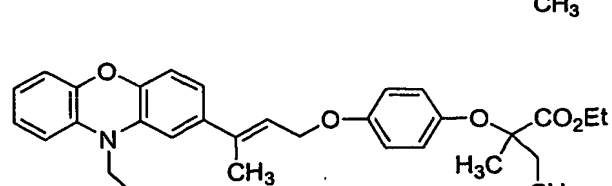
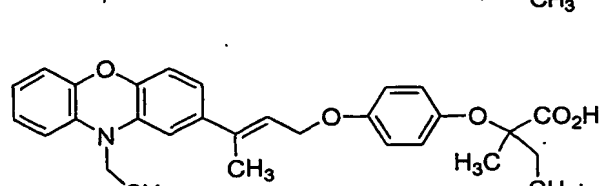
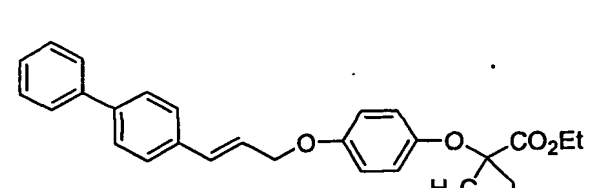
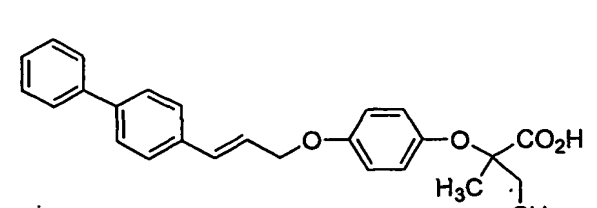


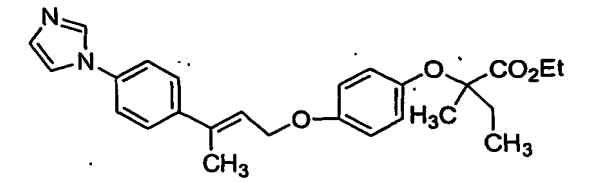
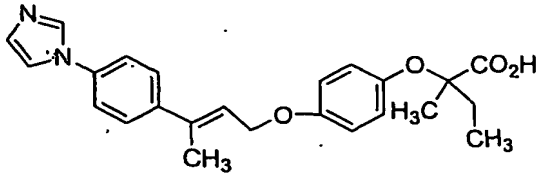
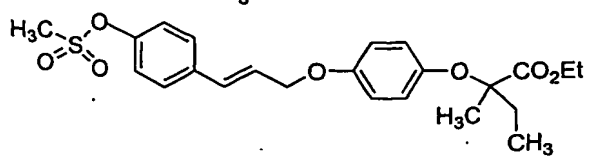
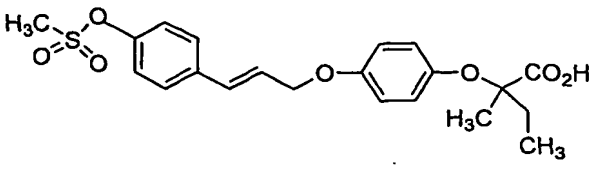
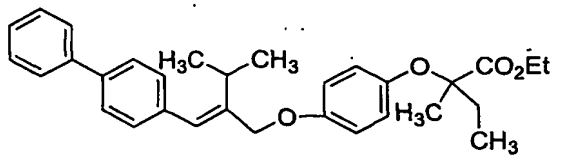
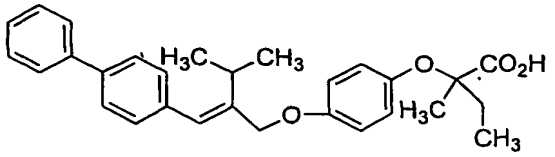
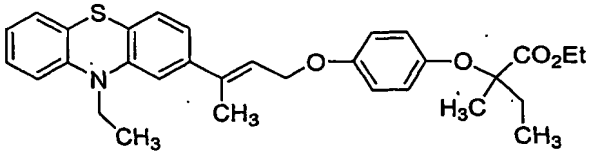
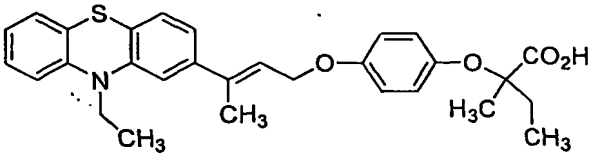
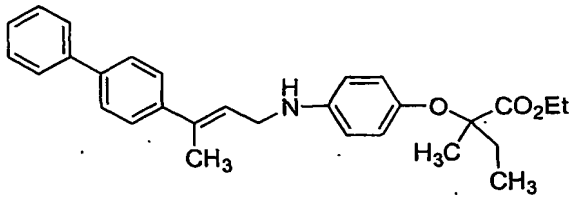
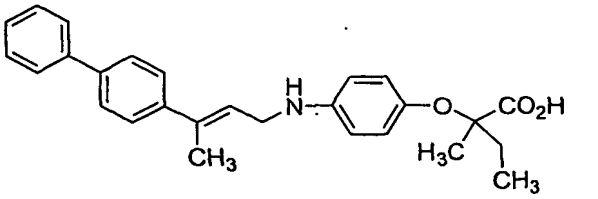
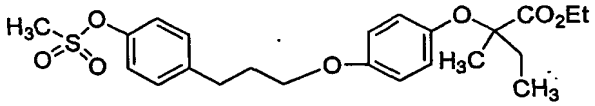
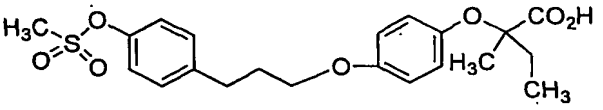


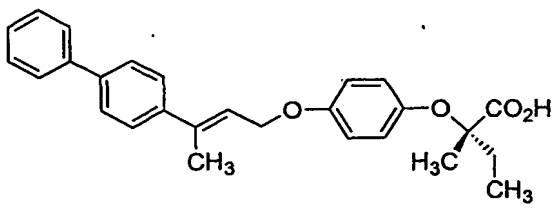
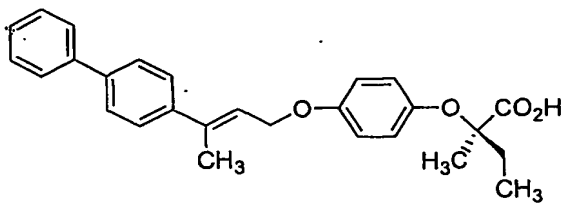
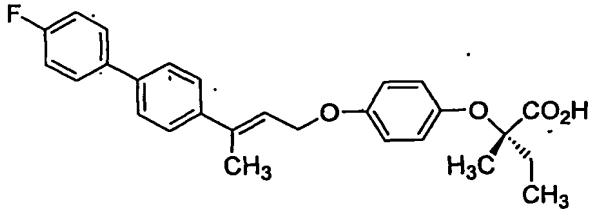
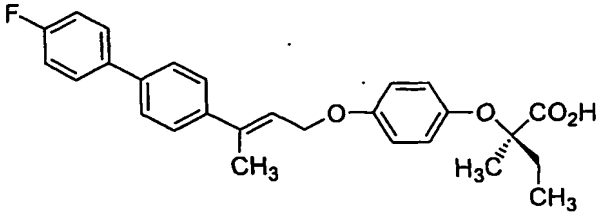
13. The compound of formula (I) as claimed in claim 1 is selected from:

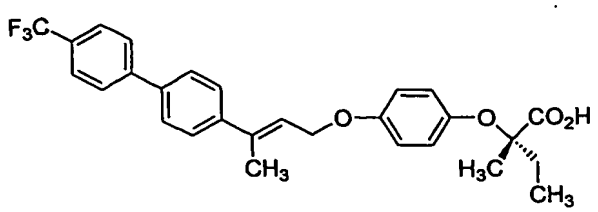
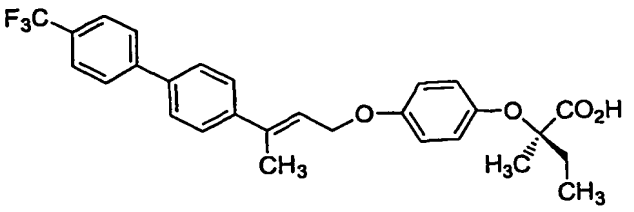
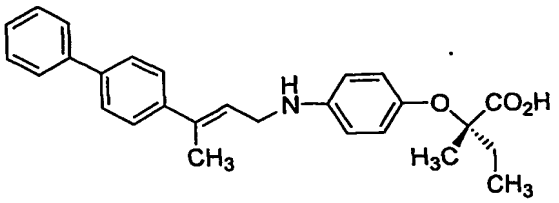
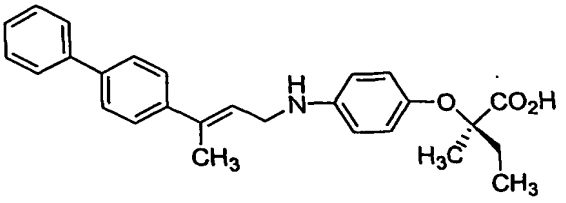
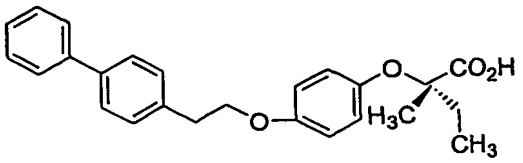
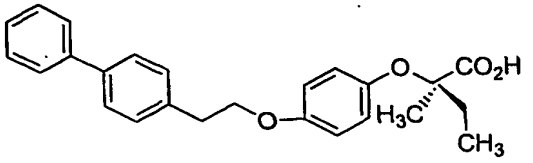
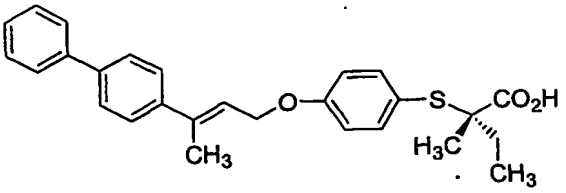
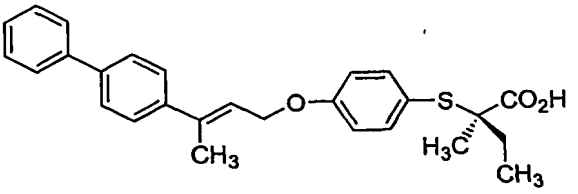
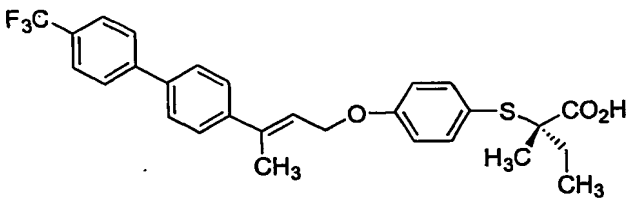
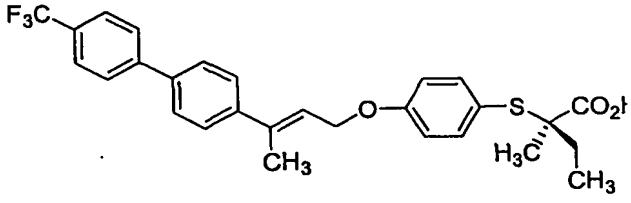



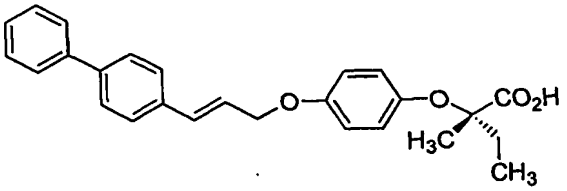
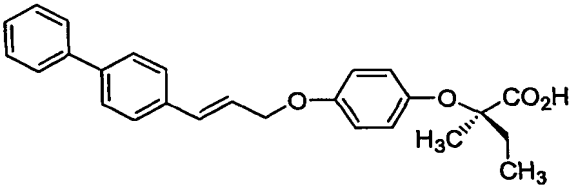

















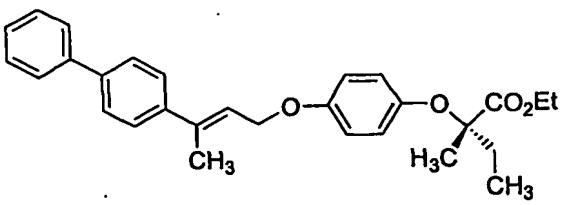
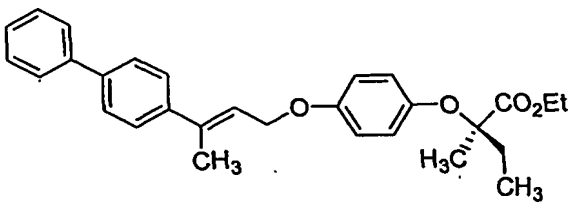
14. The compound of formula (I) as claimed in claim 1 is selected from:

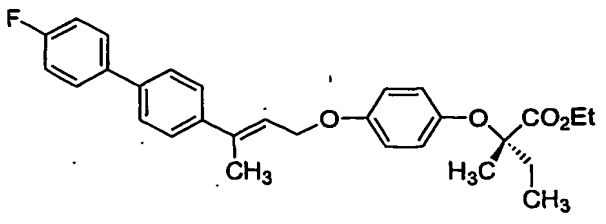
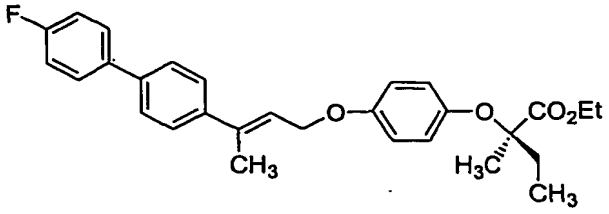
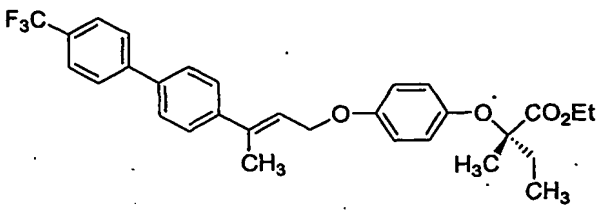
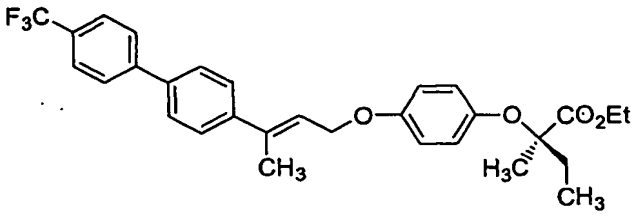
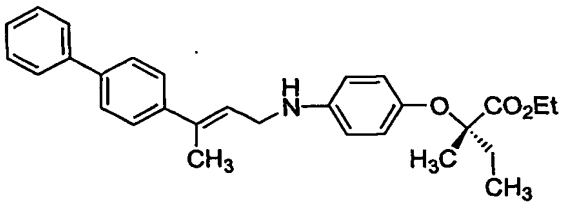
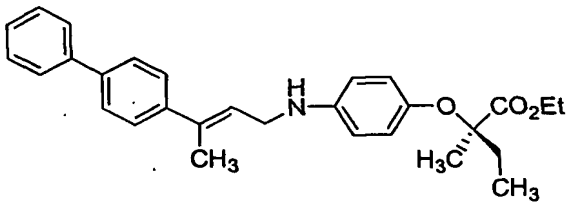
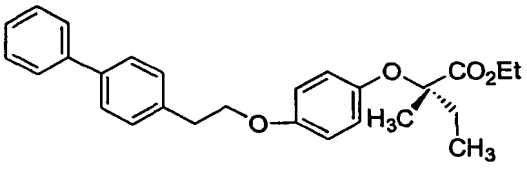
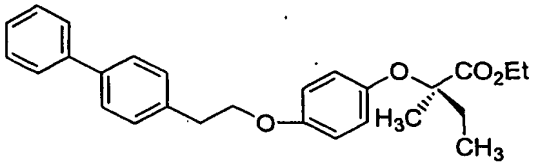
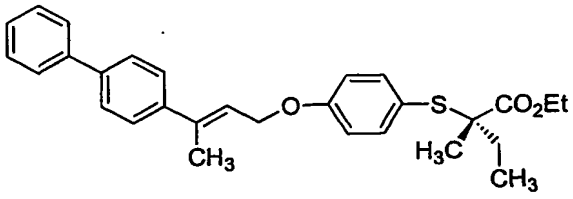
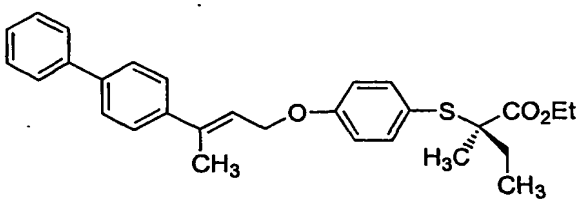
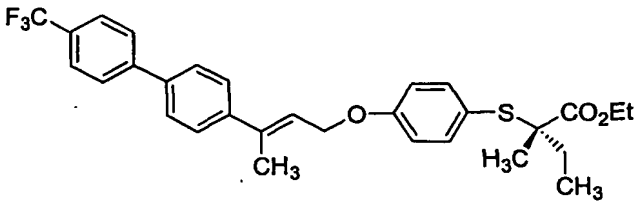
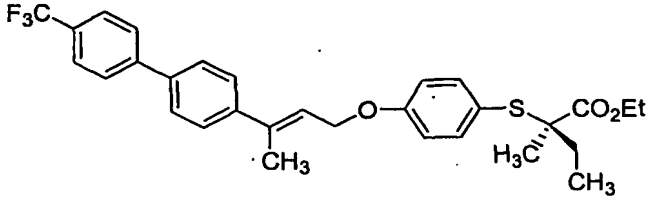
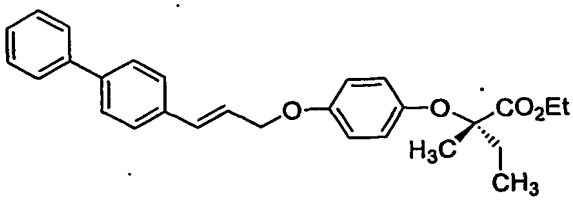
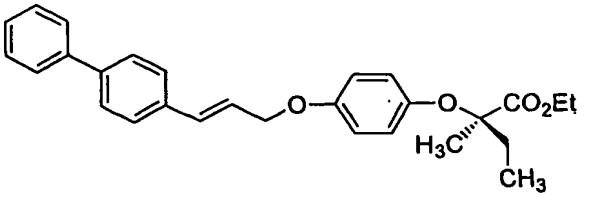





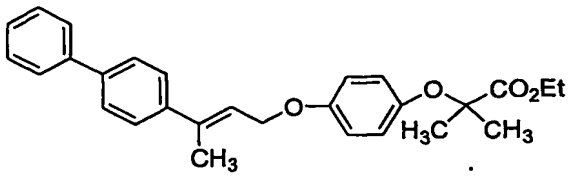
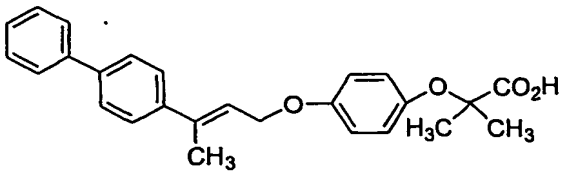
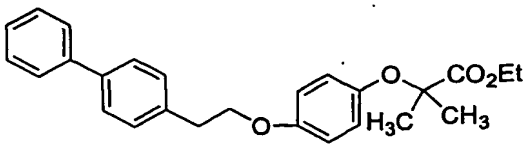
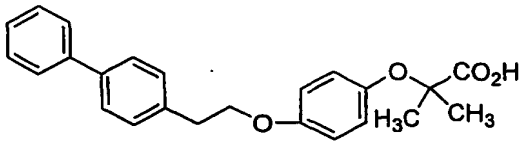
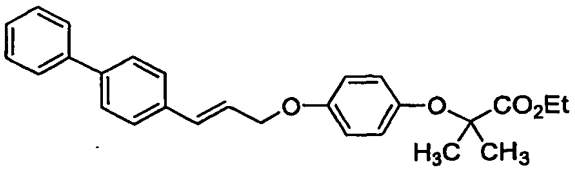
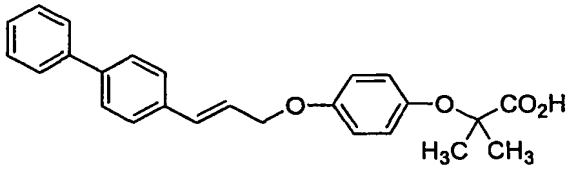
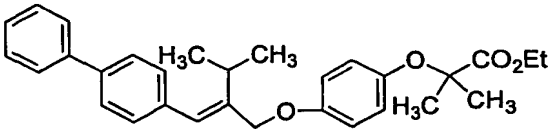
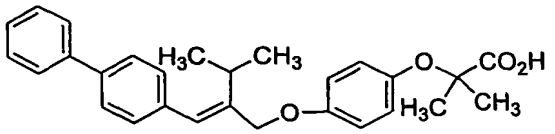
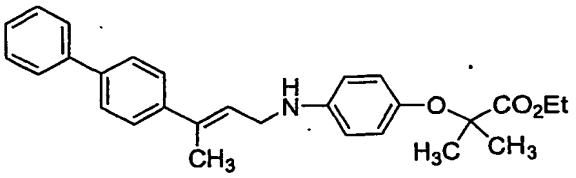
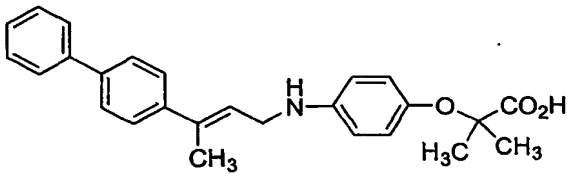
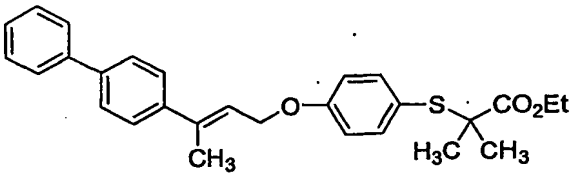
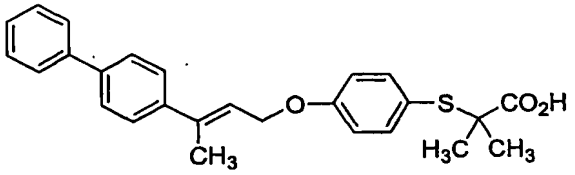
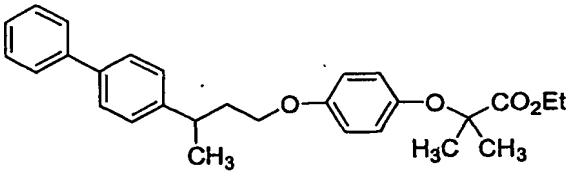
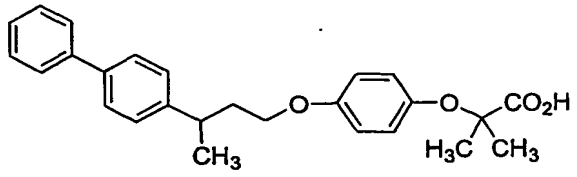



15. The compound of formula (I) as claimed in claim 1 is selected from:

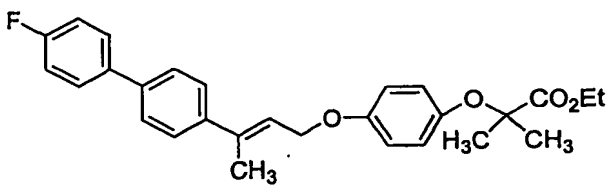
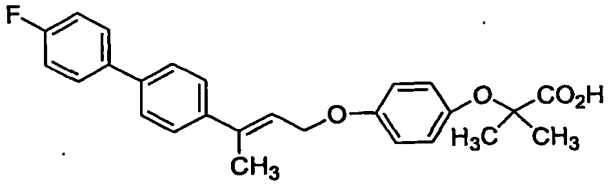



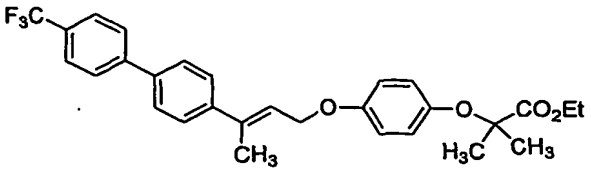
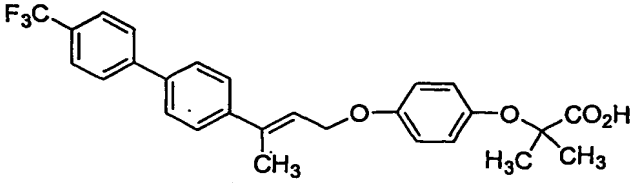
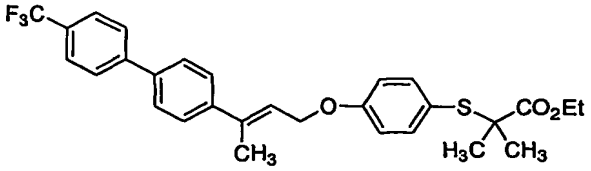
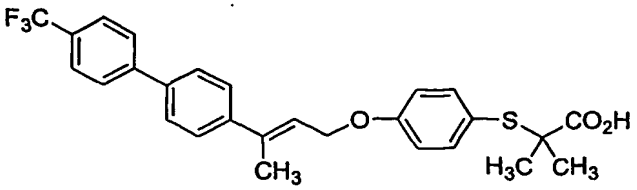















16. The compound of formula (I) as claimed in claim 1 is selected from:

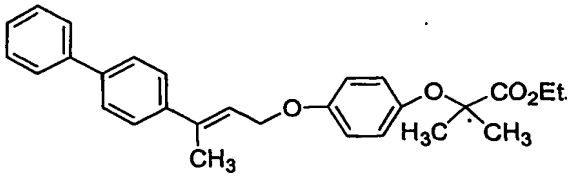
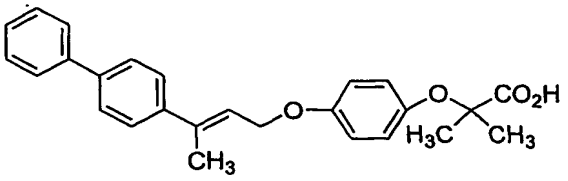
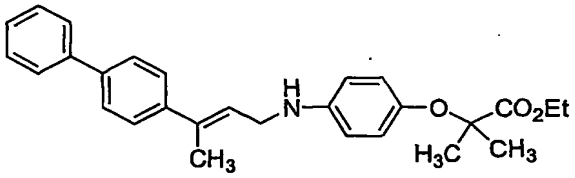
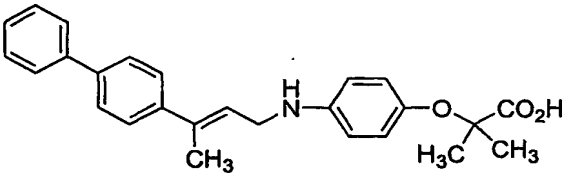
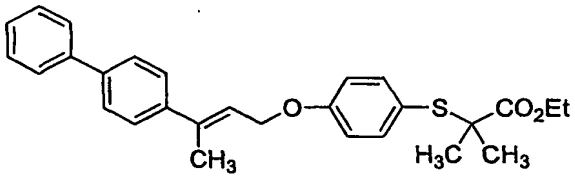
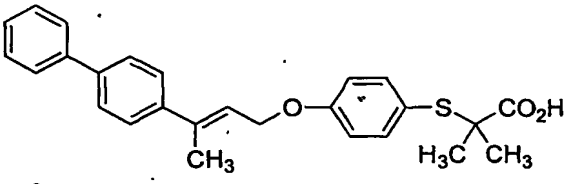
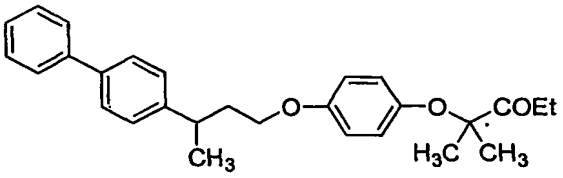
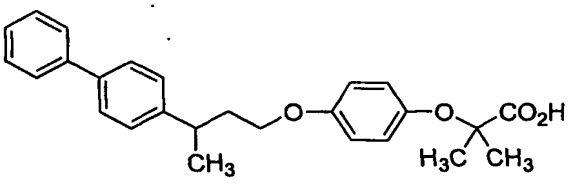















17. The compound of formula (I) as claimed in claim 1 is selected from:

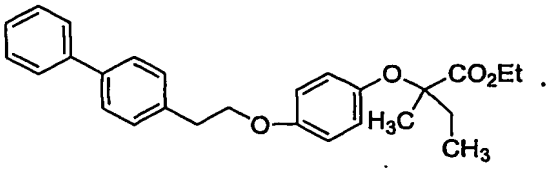
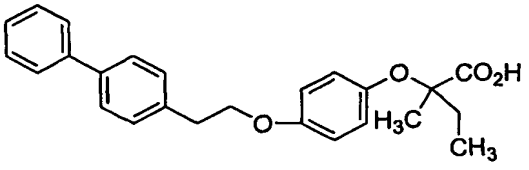
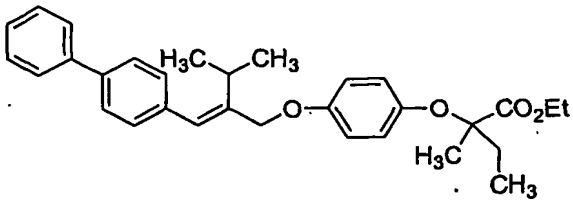
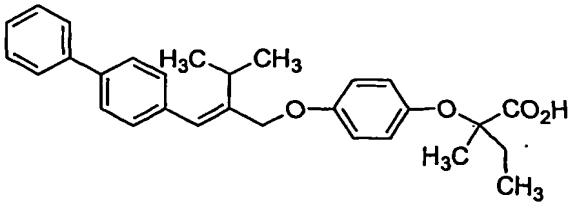



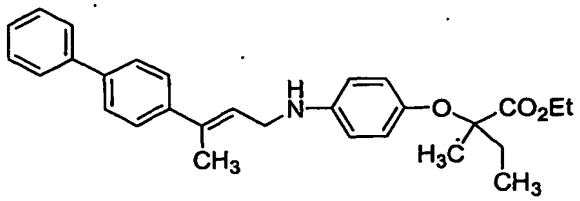
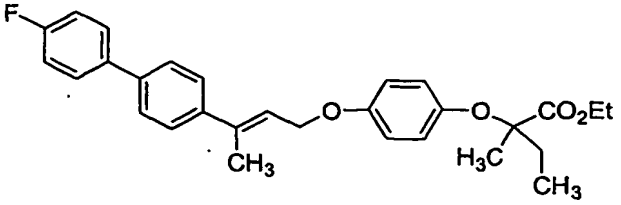
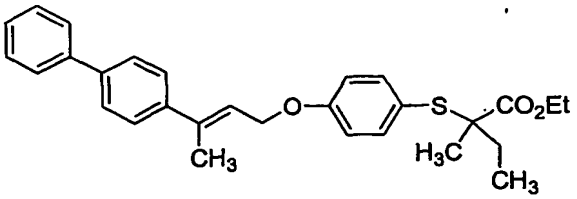
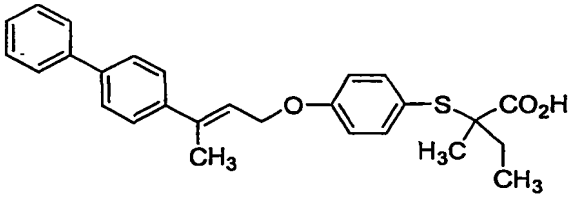
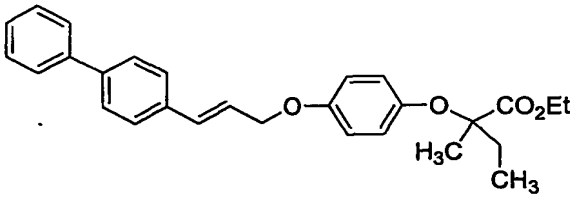
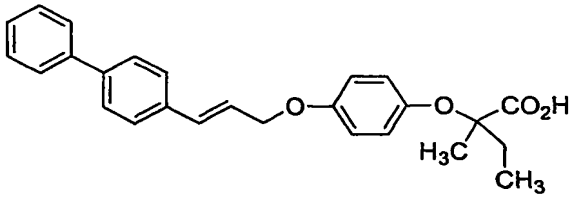
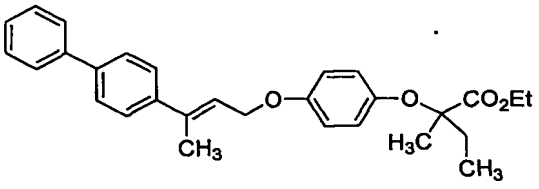
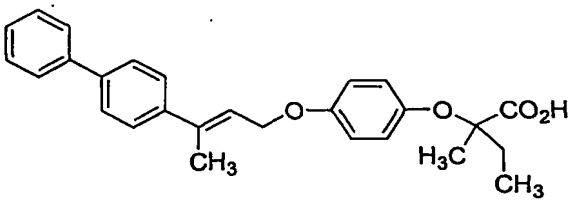





18. The compound of formula (I) as claimed in claim 1 is selected from:

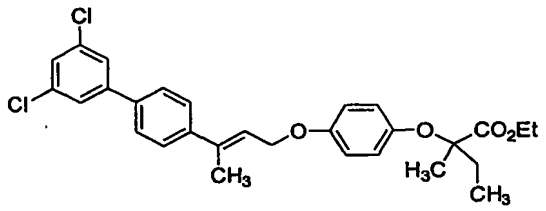
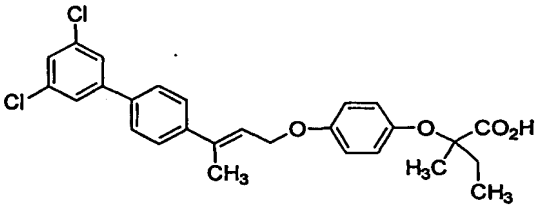
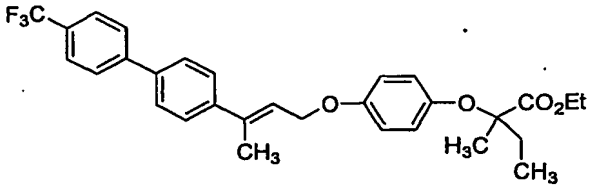
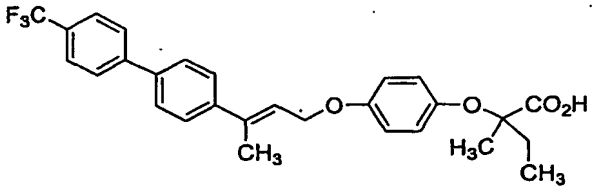
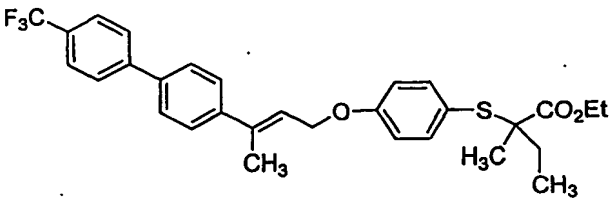
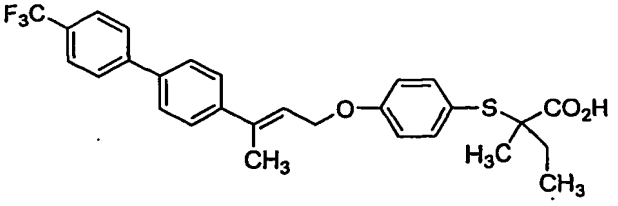









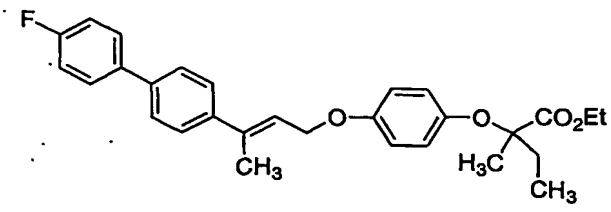
19. The compound of formula (I) as claimed in claim 1 is selected from:

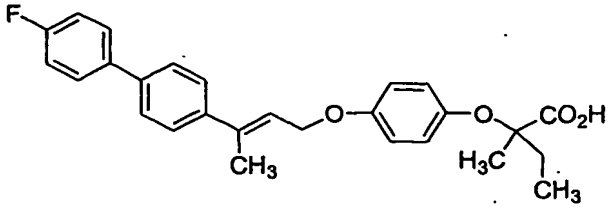





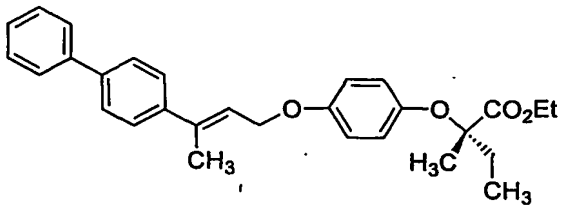
20. The compound of formula (I) as claimed in claim 1 is selected from:

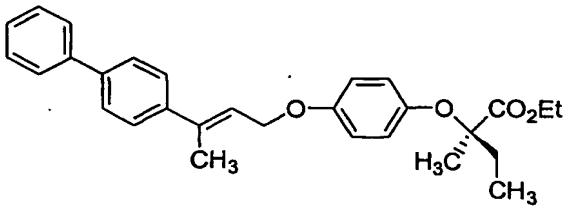







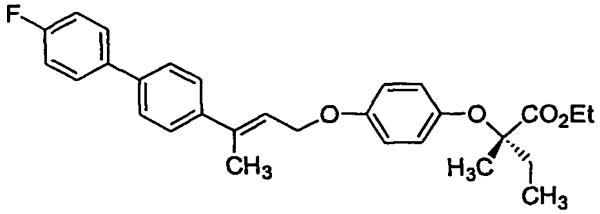


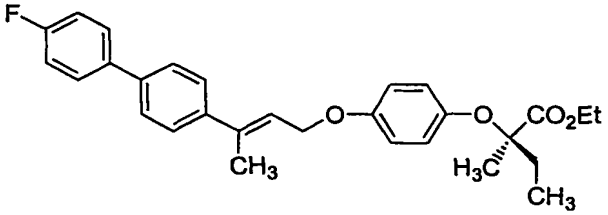


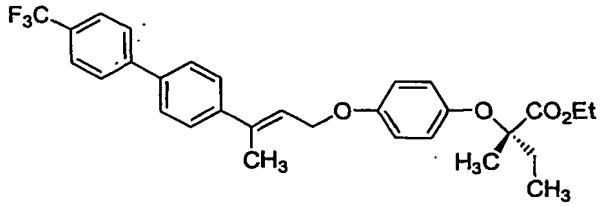
21. The compound of formula (I) as claimed in claim 1 is selected from:

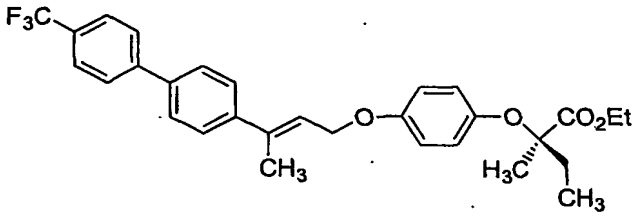




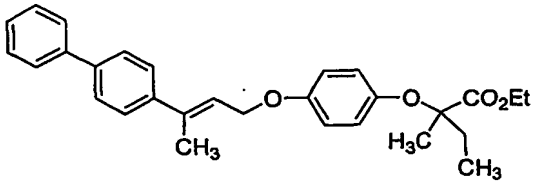


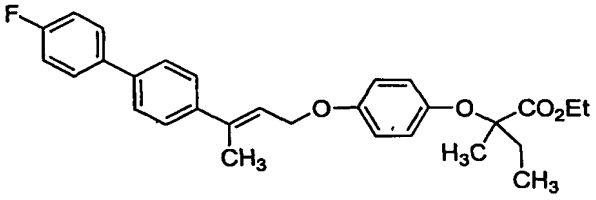


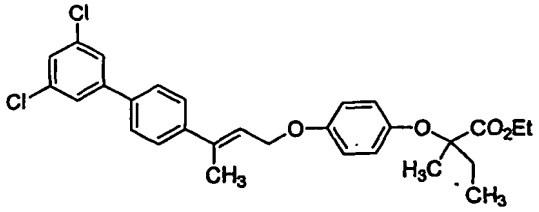


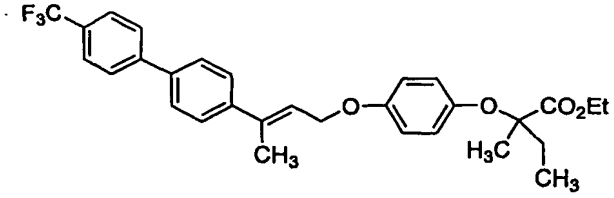


22. The compound of formula (I) as claimed in claim 1 is selected from:

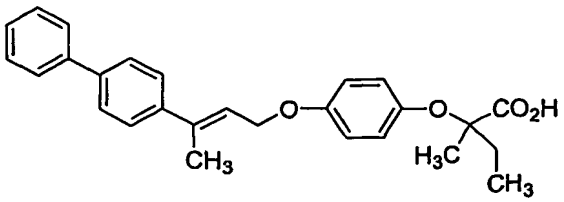
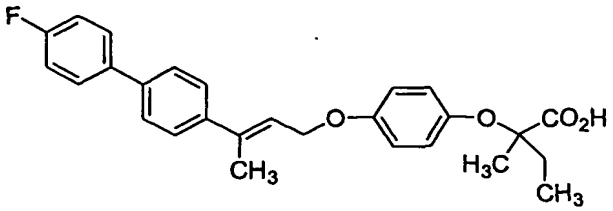
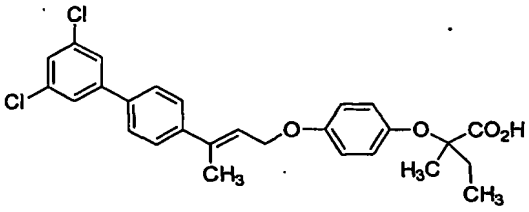
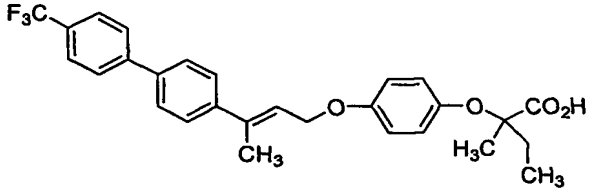




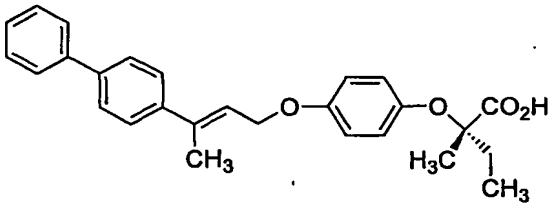
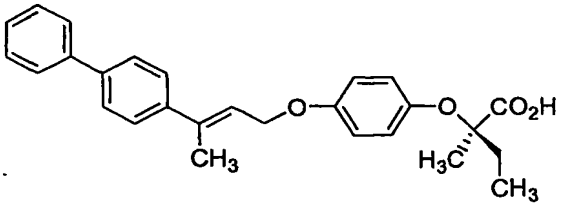
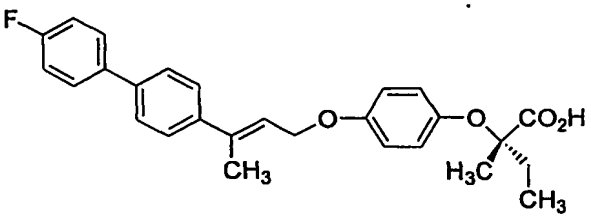
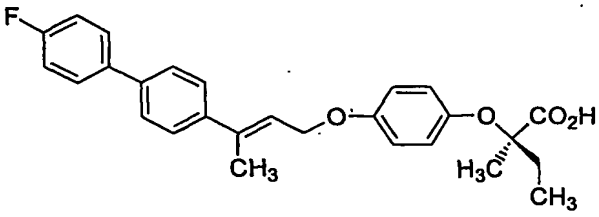




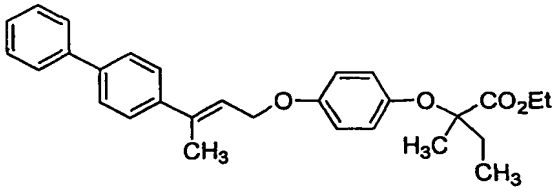
23. The compound of formula (I) as claimed in claim 1 is selected from:

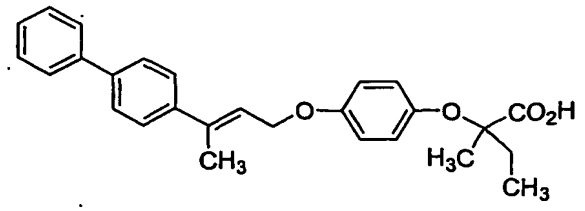
24. The compound of formula (I) as claimed in claim 1 is selected from:

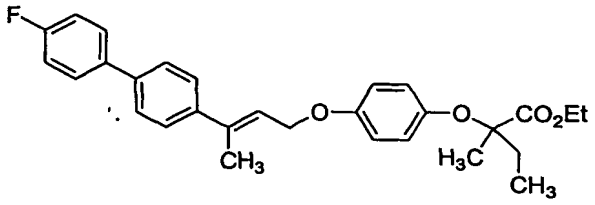
25. The compound of formula (I) as claimed in claim 1 is



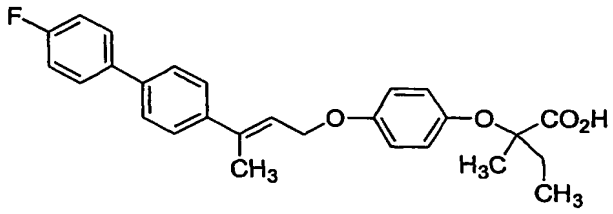
26. The compound of formula (I) as claimed in claim 1 is



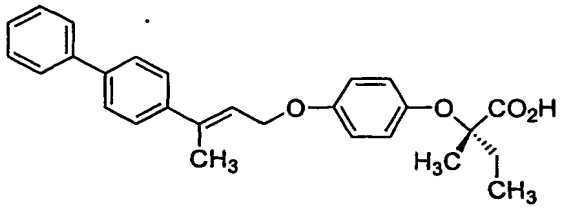
27. The compound of formula (I) as claimed in claim 1 is



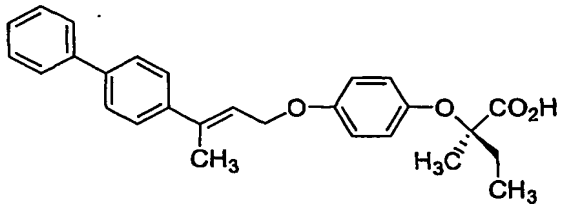
28. The compound of formula (I) as claimed in claim 1 is



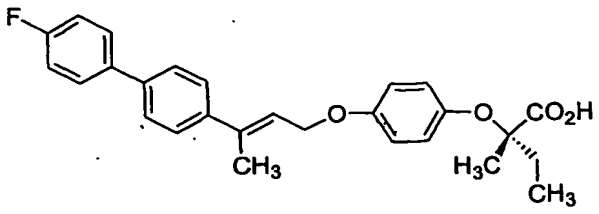
29. The compound of formula (I) as claimed in claim 1 is



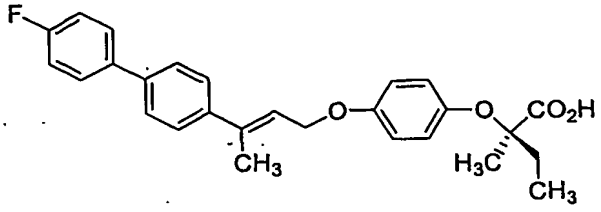
30. The compound of formula (I) as claimed in claim 1 is



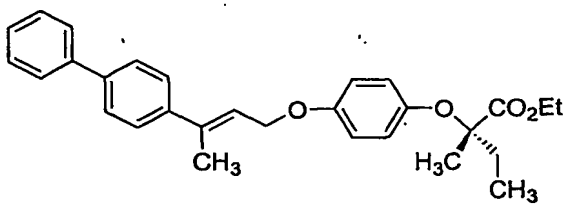
31. The compound of formula (I) as claimed in claim 1 is



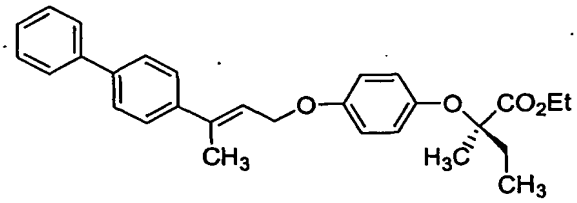
32. The compound of formula (I) as claimed in claim 1 is



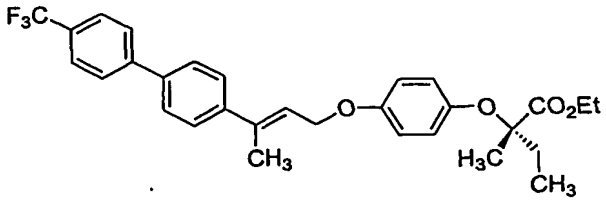
33. The compound of formula (I) as claimed in claim 1 is



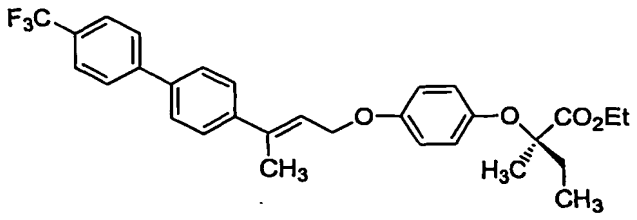
34. The compound of formula (I) as claimed in claim 1 is



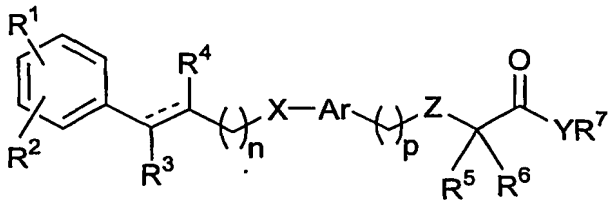
35. The compound of formula (I) as claimed in claim 1 is



36. The compound of formula (I) as claimed in claim 1 is



37. A process for the preparation of compound of formula (I)



(I)

wherein R^1 and R^2 may be same or different and independently represent hydrogen, halogen, nitro, cyano, amino, hydroxy or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, alkylcarbonyl, alkoxycarbonyl, arylcarbonyl, aryloxycarbonyl, aralkoxycarbonyl, heteroarylcarbonyl, aryloxy, aralkoxy, alkylcarbonyloxy, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, heteroarylcarbonylamino, heteroaryl, heteroaralkyl, heterocyclyl, heteroaralkoxy, heteroaryloxy, fluorenylmethoxycarbonyl (Fmoc), fluorenylmethoxycarbonylamino (N-Fmoc), $-OSO_2R^8$, $-OCONR^8R^9$, NR^8COOR^9, $-NR^8COR^9$, $-NR^8R^9$, $-NR^8SO_2R^9$, $-NR^8CONR^9R^{10}$, $-NR^8CSNR^8R^9$, $-SO_2R^8$, $-SOR^8$, $-SR^8$, $-SO_2NR^8R^9$, $-SO_2OR^8$, $-CONR^8R^9$, $-COOR^9$ or $-COR^9$, wherein R^8, R^9 and R^{10} may be same or different and independently represent hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, aryloxy or heteroaryl; or R^1 and R^2 together represent a monocyclic or polycyclic aromatic or non aromatic ring or an aromatic ring fused to a non aromatic ring, which may optionally contain 1 to 3 heteroatoms selected from N, S, or O and may be unsubstituted or have up to 1 to 4 substituents which may be identical or different.

R^3 and R^4 may be same or different and independently represent hydrogen, halogen, optionally substituted group selected from alkyl, cycloalkyl, alkanoyl, aryl, aroyl, aralkyl or aralkanoyl group. 'n' and 'p' independently represents 0-6.

X represents O, S, NR where R represents hydrogen or optionally substituted groupsselected from alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, alkanoyl, or aroyl.

Ar represents optionally substituted single or fused aromatic, heteroaromatic or heterocyclic group.

Z represents O, S, NR where R is as defined above.

R^5, R^6 and R^7 may be same or different and independently represent hydrogen, hydroxy, halogen or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, heteroaryl, heterocyclyl or heteroaralkyl groups. R^5 and R^6 together may form a 5 or 6 membered cyclic rings, which may contain one or two hetero atoms selected from O, S or N.

Y represents O or NR^{11} where R^{11} represents hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclyl or heteroaryl.

R^7 and R^{11} together may also form a 5 or 6 membered cyclic ring, which may contain one or two hetero atoms selected from O, S or N.

'----' represents a bond or no bond.

When the fused rings formed by R^1 and R^2 are substituted, the substituents are selected from $(C_1\text{-}C_{10})$alkyl, halogen, hydroxy, halo$(C_1\text{-}C_{10})$alkyl, nitro, amino, cyano, oxo, or thioxo.

When the groups represented by R^1 and R^2 are substituted, the substituents are selected from halogen, hydroxy, nitro, amino, oxo, thioxo, optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, alkylsulfonyl, alkylsulinyl, alkylsulfanyl, alkylsulfonyloxy, alkylsulfinyloxy or alkylsulfanyloxy, the substituents are selected from halogen, hydroxyl, nitro, amino, cyano or alkyl.

When the groups represented by R, R^3, R^4, R^7 and R^{11} are substituted, the substituents are selected from halogen, nitro, amino, hydroxy, alkyl, oxo or aralkyl

When the groups represented by R^5, R^6 and R^7 are substituted, the substitutents are selected from halogen, hydroxy, nitro, alkyl, cycloalkyl, alkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl or amino.

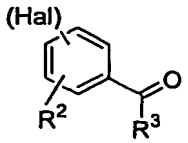
When the cyclic rings formed by R^5 and R^6 are substituted, the substituents are selected from alkyl, halogen, hydroxy, haloalkyl, nitro, amino, cyano, oxo, or thioxo.

The groups defined for R, R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10} and R^{11} may be unsubstiuted, or have 1 to 4 substituents, which may be identical or different,

which comprises the following processes:

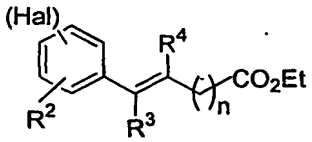
Process (a):

(i) Reacting the compound of formula (Ia)



(Ia)

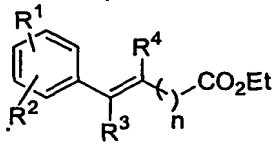
where 'Hal' represents a halogen atom selected bromine or iodine, R^2 is hydrogen and R^3 is as defined above in this claim in the description of compound of formula (I), in a Witting-Horner reaction manner, by using phosphono acetate compounds selected from triethyl phosphono acetates, trimethylphosphono acetate or Ph_3P^+-CH_2^--CO_2Et in the presence of a base selected from sodium hydride, potassium tertiary butoxide, potassium hydroxide, sodium methoxide or sodium ethoxide. The solvent used in the reaction is selected from alcohol selected from methanol, ethanol, propanol, isopropanol or tetrahydrofuran, ether, dioxane, dimethoxyethane or a mixture thereof at a temperature range of 0 to 10 °C and duration of 10 to 24 h to obtain a compound of formula (Ib)



(Ib)

where 'Hal' represents a halogen atom selected bromine or iodine, R^2 is hydrogen and R^3 and R^4 are as defined above in this claim in the description of compound of formula (I),

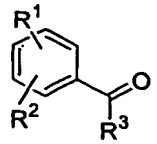
(ii) conversion of the compound of formula (Ib), to a compound of formula (Ic)



(Ic)

where R^1 represent aryl group, R^2 represents hydrogen atom and R^3 and R^4 are as defined as defined above in this claim in the description of compound of formula (I), in a Suzuki coupling reaction manner, by using aryl boronic acid with palladium catalyst like $Pd(PPh_3)_4$, $PdCl_2$, $Pd(dba)_2$. The solvent used is selected from terahydrofuran, dioxane, acetonitrile, dimethylether, diethylether, dimethylformamide or a mixture thereof at reflux temperature of the solvent used for a period of 15 to 28 h.

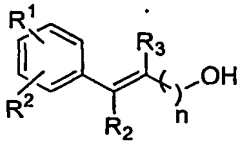
Alternatively, the compound of formula (Ic), is prepared from compound of formula (Ia')



(Ia')

where R^1, R^2 and R^3 are as defined above in this claim in the description of compound of formula (I), by using substituted phosphone acetate compounds selected from triethyl phosphono acetates, trimethylphosphono acetate or Ph_3P^+-CH_2^--CO_2Et.

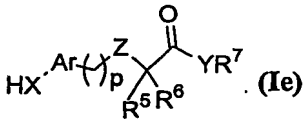
(iii) The reduction of the compound of formula (Ic) to a compound of formula (Id)



(Id)

where R^1 represent aryl group, R^2 represents hydrogen atom and R^3 and R^4 are as defined above in this claim in the description of compound of formula (I), is carried out in the presence of a reducing agent selected from diisobutyl aluminium hydride (DIBAL-H), aluminium hydride (AlH_3) or lithium aluminium (LAH). The solvent used in the reaction is selected from toluene, tetrahydrofuran, ether, dioxane, dimethoxyethane or a mixture thereof at a temperature range of -90 to -25 °C, for a duration of 0.5 h to 2 h. The temperature and duration of the reaction can be decreased in the presence of AlH_3.

(iv) coupling of a compound of formula (Id) with a compound of formula (Ie)



(Ie)

where p represents 1, Y represents O or S, R^5 and R^6 are as defined above in this claim in the description of compound of formula (I), R^7 is as defined above in this claim in the description of compound of formula (I) except hydrogen, to obtain compound of formula (I), where p represents 1, Y represents O or S, R^7 is as defined above in this claim in the description of compound of formula (I) except hydrogen atom and all other symbols are as defined above in this claim in the description of compound of formula (I), by using PPh_3, DIAD or DEAD. The solvent used in the reaction is selected from tetrahydrofuran, toluene, benzene or a mixture thereof at a temperature range of 20 to 40 °C, for duration of 40 to 80 h.

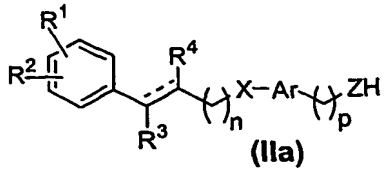
(v) hydrolysis of the compound of general formula (I) where R^7 represents hydrogen atom, Y represents O or S, p represents 1 and all other symbols are as defined above in this

claim in the description of compound of formula (I), is obtained from a compound of formula (I) where R^7 represents all groups defined above in this claim in the description of compound of formula (I) except hydrogen, Y represents O or S, p represents 1 and all other symbols are as defined above in this claim in the description of compound of formula (I), in the presence of a base selected from sodium hydroxide, potassium hydroxide, lithium hydroxide, potassium carbonate or sodium carbonate. The solvent used is selected from alcohols selected from methanol, ethanol, propanol, isopropanol or a mixture thereof, water, tetrahydrofuran, dioxane, ether or a mixture thereof at a temperature range of 30 to 80 °C, for duration of 2 to 24 h.

(vi) the compound of general formula (I) where Z represents O or S, p represents 1 and R^7 represents hydrogen or alkyl group are converted to compound of formula (I), where Y represents NR^{11} by reacting with an amine of the formula NHR^7R^{11}, where R^7 and R^{11} are as defined above in this claim in the description of compound of formula (I), to yield a compound of formula (I) where Y represents NR^{11} and all other symbols are as defined above in this claim in the description of compound of formula (I). Alternatively, the compound of formula (I) where YR^7 represents OH are converted to acid halide, preferably where YR^7 = Cl, by reacting with reagents selected from oxalyl chloride or thionyl chloride, followed by treatment with an amine of the formula NHR^7R^{11} where R^7 and R^{11} are as defined above in this claim in the description of compound of formula (I). Alternatively, mixed anhydrides are obtained from compound of formula (I) where YR^7 represents OH and all other symbols are as defined above in this claim in the description of compound of formula (I), by treating with acid halide selected from acetyl chloride, acetyl bromide, pivaloyl chloride or dichlorobenzoyl chloride. The reaction can be carried out in the presence of pyridine, triethylamine or diisopropyl ethylamine. Coupling reagent selected from DCC/DMAP . DCC/HOBt, EDCI/HOBT, DIC/HOBt, ethylchloroformate, isobutylchloroformate can be used to activate the acid. The solvent used is selected from halogenated hydrocarbon like $CHCl_3$ or CH_2Cl_2; hydrocarbon like benzene, toluene, xylene or a mixture thereof at a temperature range of –40 to 40 °C. The acid halide or mixed anhydride or activated acid obtained by coupling reagents described above thus prepared may further be treated with an amine of the formula NHR^7R^{11} where R^7 and R^{11} are as defined above in this claim in the description of compound of formula (I), to yield a compound of formula (I) where Y represents NR^{11} and all other symbols are as defined above in this claim in the description of compound of formula (I).

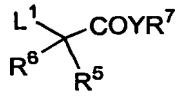
Process (b):

The reaction of compound of formula (IIa)



(IIa)

where all symbols are as defined above in this claim in the description of compound of formula (I), with a compound of formula (IIb)

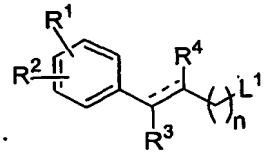


(IIb)

where L^1 is a leaving group selected from hydroxy, halogen atom, *p*-toluenesulfonate, methanesulfonate or trifluoromethanesulfonate, and all other symbols are defined above in this claim in the description of compound of formula (I), is carried out in the presence of a solvent selected from THF, DMF, DMSO, DME, toluene, benzene, xylene or a mixture thereof in the presence of a base selected from K_2CO_3, Na_2CO_3, $NaNH_2$, n-BuLi, NaH, KH, triethylamine, collidine, lutidine or a mixture thereof optionally in an inert atmosphere of nitrogen, helium or argon at a temperature range of 0 to 120 °C, for a duration of 1 to 72 h.

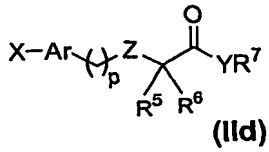
Process (c):

The reaction of compound of formula (IIc)



(IIc)

where L^1 represents a leaving group selected from hydroxy, halogen atom, *p*-toluenesulfonate, methanesulfonate or trifluoromethanesulfonate, and all other symbols are as defined above in this claim in the description of compound of formula (I), with compound of formula (IId)



(IId)

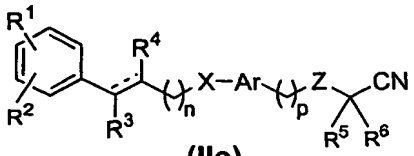
where all symbols are as defined above in this claim in the description of compound of formula (I), is carried out in the presence of a solvent selected from THF, DMF, DMSO, DME or a mixture thereof optionally in an inert atmosphere of nitrogen, argon or helium in

the presence of a base selected from K_2CO_3, Na_2CO_3 or NaH, KH, triethyl amine or a mixture thereof at a temperature range of 0 to 120 °C and duration of 1 to 72 h.

or

Process (d):

The conversion of compound of formula (IIe)



(IIe)

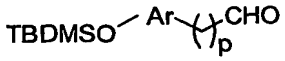
where all symbols are as defined above in this claim in the description of compound of formula (I), to a compound of formula (I), where YR^7 represents OH and all other symbols are as defined above in this claim in the description of compound of formula (I), is carried out either in the presence of a base or an acid. Selection of base or an acid is not critical. Any base normally used for the hydrolysis of nitrile to an acid can be employed, metal hydroxide selected from NaOH or KOH in an aqueous solvent or any acid normally used for hydrolysis of nitrile to ester can be employed selected from dry HCl in an excess of alcohol like methanol, ethanol, propanol, isopropanol or a mixture thereof at a temperature range 0 °C to 150 °C and duration of 0.25 to 48 h.

Process (e):

(i) The compound of formula (IIIa)

(IIIa)

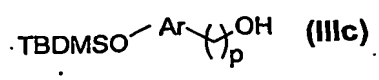
where 'p' and 'Ar' are as defined above in this claim in the description of compound of formula (I), is converted to a compound of formula (IIIb)



(IIIb)

by reacting with TBDMS-Hal, $(CH_3)_3Si$-Hal or Ph_3C-Hal where 'Hal' represents halogen atom in the presence of a base used selected from triethylamine, Na_2CO_3 or K_2CO_3 and a solvent selected from dichloromethane, tetrahydrofuran, chloroform, dimethylether, diethylether, dioxane, benzene, toluene or a mixture thereof at a temperature range of 0 °C to room temperature and duration of 8 to 20 h.

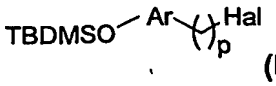
(ii) The compound of formula (IIIb) is converted to a compound of formula (IIIc)



(IIIc)

by using $NaBH_4$ in the presence of an alcohol selected from methanol, ethanol, propanol, isopropanol or a mixture thereof as a solvent at room temperature for a duration of 1 to 4 h.

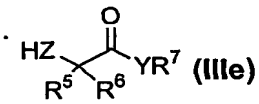
(iii) The compound of formula (IIIc) is converted to a compound of formula (IIId)



(IIId)

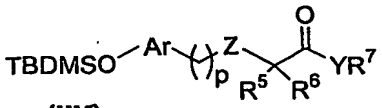
in the presence of $C(Hal)_4$, where 'Hal' represents halogen atom in the presence of PPh_3 and a solvent selected from dichloromethane, tetrahydrofuran, chloroform, dimethylether, diethylether, dioxane, benzene, toluene or a mixture thereof at room temperature for a duration of 0.5 to 2 h.

(iv) The compound of formula (IIId) is reacted with the compound of formula (IIIe)



(IIIe)

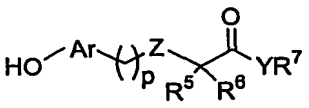
where all the symbols are as defined above in this claim in the description of compound of formula (I), to obtain a compound of formula (IIIf)



(IIIf)

where all the symbols are as defined above in this claim in the description of compound of formula (I). The reaction is carried out in the presence of a base selected from NaH, KH, sodium amide or potassium tertiary butoxide in the presence of a selected from DMSO, THF, toluene, benzene or a mixture thereof at a temperature range of 50 to 90 °C, for a period of 8 to 15 h.

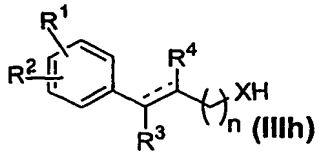
(v) The deprotection of compound of formula (IIIf) to obtain a compound of formula (IIIg)



(IIIg)

where all the symbols are as defined above in this claim in the description of compound of formula (I), is carried out by using tetrabutylammoniumfluoride (TBAF) in the presence of a solvent selected from water, THF, dioxane, dichloromethane, chloroform, methanol, ethanol or a mixture thereof at a temperature range of 20 to 40 °C and duration of 1 to 6 h.

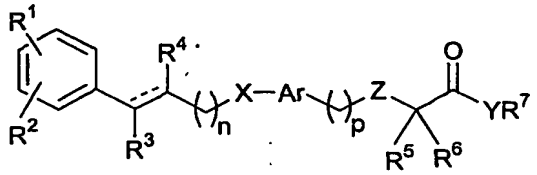
(vi) The compound of formula (IIIg) is reacted with the compound of formula (IIIh)



where all the symbols are as defined above in this claim in the description of compound of formula (I), to obtain a compound of formula (I), where Y represents O or S, R^7 represents all groups as defined above in this claim in the description of compound of formula (I) except hydrogen. The reaction is carried out by using PPh_3, diisopropyl azadicarboxylate (DIAD), or diethyl azadicarboxylate (DEAD) in the presence of a solvent selected from tetrahydrofuran, toluene, benzene or a mixture thereof at a temperature range of 20 to 40 °C and duration of 40 to 80 h.

(vii) The compound of general formula (I) where R^7 represents hydrogen atom, Y represents O or S, p represents 1 and all other symbols are as defined above in this claim in the description of compound of formula (I), is obtained from compound of formula (I) where R^7 is as defined above in this claim in the description of compound of formula (I) except hydrogen, Y represents O or S, p represents 1 and all other symbols are as defined above in this claim in the description of compound of formula (I), by hydrolysis using conventional methods. The reaction is carried out in the presence of a base selected from sodium hydroxide, potassium hydroxide, lithium hydroxide, potassium carbonate or sodium carbonate in the presence of a solvent alcohol like methanol, ethanol, propanol, isopropanol or a mixture thereof, water, tetrahydrofuran, dioxane, ether or a mixture thereof at a temperature range of 30 to 80 °C and duration of 2 to 24 h.

38. A process for the preparation of resolution of compound of formula (I),



(I)

wherein R^1 and R^2 may be same or different and independently represent hydrogen, halogen, nitro, cyano, amino, hydroxy or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, alkylcarbonyl, alkoxycarbonyl, arylcarbonyl, aryloxycarbonyl, aralkoxycarbonyl, heteroarylcarbonyl, aryloxy, aralkoxy, alkylcarbonyloxy, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, heteroarylcarbonylamino, heteroaryl, heteroaralkyl, heterocyclyl, heteroaralkoxy,

heteroaryloxy, fluorenylmethoxycarbonyl (Fmoc), fluorenylmethoxycarbonylamino (N-Fmoc), $-OSO_2R^8$, $-OCONR^8R^9$, NR^8COOR^9, $-NR^8COR^9$, $-NR^8R^9$, $-NR^8SO_2R^9$, $-NR^8CONR^9R^{10}$, $-NR^8CSNR^8R^9$, $-SO_2R^8$, $-SOR^8$, $-SR^8$, $-SO_2NR^8R^9$, $-SO_2OR^8$, $-CONR^8R^9$, $-COOR^9$ or $-COR^9$, wherein R^8, R^9 and R^{10} may be same or different and independently represent hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, aryloxy or heteroaryl; or R^1 and R^2 together represent a monocyclic or polycyclic aromatic or non aromatic ring or an aromatic ring fused to a non aromatic ring, which may optionally contain 1 to 3 heteroatoms selected from N, S, or O and may be unsubstituted or have up to 1 to 4 substituents which may be identical or different.

R^3 and R^4 may be same or different and independently represent hydrogen, halogen, optionally substituted group selected from alkyl, cycloalkyl, alkanoyl, aryl, aroyl, aralkyl or aralkanoyl group. 'n' and 'p' independently represents 0-6.

X represents O, S, NR where R represents hydrogen or optionally substituted groupsselected from alkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, alkanoyl, or aroyl.

Ar represents optionally substituted single or fused aromatic, heteroaromatic or heterocyclic group.

Z represents O, S, NR where R is as defined above.

R^5, R^6 and R^7 may be same or different and independently represent hydrogen, hydroxy, halogen or optionally substituted group selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, heteroaryl, heterocyclyl or heteroaralkyl groups. R^5 and R^6 together may form a 5 or 6 membered cyclic rings, which may contain one or two hetero atoms selected from O, S or N.

Y represents O or NR^{11} where R^{11} represents hydrogen, optionally substituted group selected from alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclyl or heteroaryl.

R^7 and R^{11} together may also form a 5 or 6 membered cyclic ring, which may contain one or two hetero atoms selected from O, S or N.

'----' represents a bond or no bond.

When the fused rings formed by R^1 and R^2 are substituted, the substituents are selected from $(C_1\text{-}C_{10})$alkyl, halogen, hydroxy, halo$(C_1\text{-}C_{10})$alkyl, nitro, amino, cyano, oxo, or thioxo.

When the groups represented by R^1 and R^2 are substituted, the substituents are selected from halogen, hydroxy, nitro, amino, oxo, thioxo, optionally substituted groups selected from alkyl, cycloalkyl, alkoxy, aryl, aralkyl, alkylsulfonyl, alkylsulinyl, alkylsulfanyl,

alkylsulfonyloxy, alkylsulfinyloxy or alkylsulfanyloxy, the substituents are selected from halogen, hydroxyl, nitro, amino, cyano or alkyl.

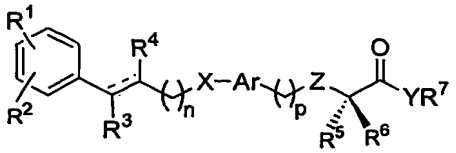
When the groups represented by R, R^3, R^4, R^7 and R^{11} are substituted, the substituents are selected from halogen, nitro, amino, hydroxy, alkyl, oxo or aralkyl

When the groups represented by R^5, R^6 and R^7 are substituted, the substitutents are selected from halogen, hydroxy, nitro, alkyl, cycloalkyl, alkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl or amino.

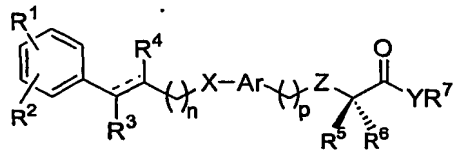
When the cyclic rings formed by R^5 and R^6 are substituted, the substituents are selected from alkyl, halogen, hydroxy, haloalkyl, nitro, amino, cyano, oxo, or thioxo.

The groups defined for R, R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10} and R^{11} may be unsubstiuted, or have 1 to 4 substituents, which may be identical or different,

to obtain substantially pure compounds of formula (Ii) and (Iii)



(Ii)



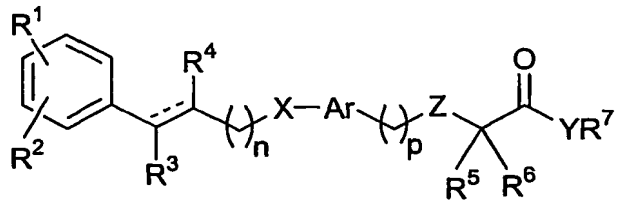
(Iii)

where all symbols are as defined above,

by using chiral base selected from S(+)-α-methylbenzylamine, R(-)-α-methylbenzylamine, S(+)-lysine, R(-)-lysine, S(+)-N-methyl-D-glucamine, R(-)-N-methyl-D-glucamine, R(-)-phenyl glycinol, S(+)-phenyl glycinol, S(+)-brucine, R(-)-brucine, cinchona alkaloids and their derivatives

39. The process as claimed in claim 38, wherein the chiral base is selected from S(+)-phenolgycenol, R(-)-phenolgycenol.

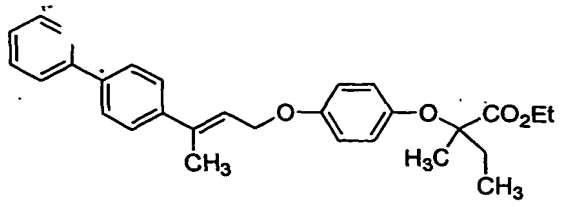
40. A pharmaceutical composition, which comprises a compound of formula (I)



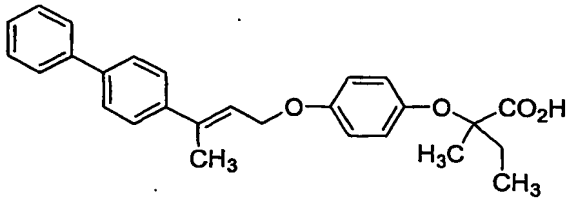
(I)

as defined in claim 1 and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

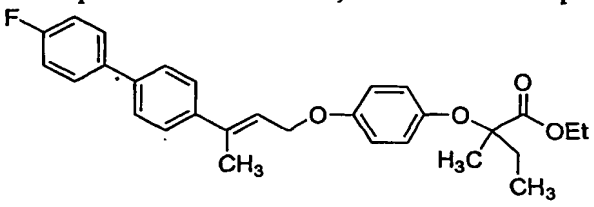
41. The pharmaceutical composistion of claim 40, wherein the compound is



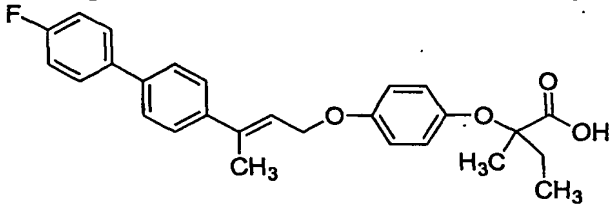
42. The pharmaceutical composistion of claim 40, wherein the compound is



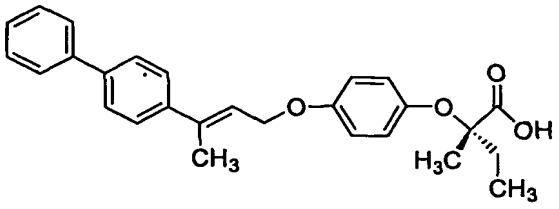
43. The pharmaceutical composistion of claim 40, wherein the compound is



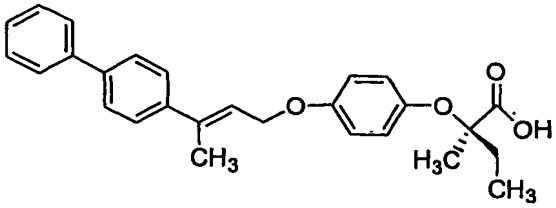
44. The pharmaceutical composistion of claim 40, wherein the compound is



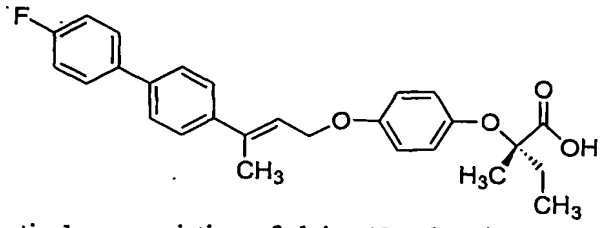
45. The pharmaceutical composistion of claim 40, wherein the compound is



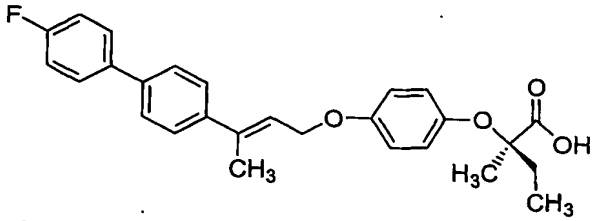
46 The pharmaceutical composistion of claim 40, wherein the compound is



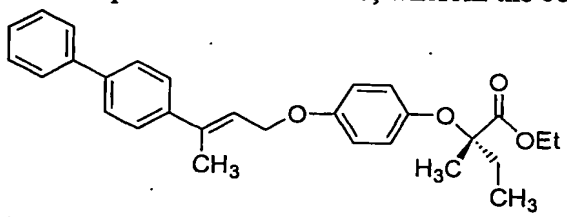
47. The pharmaceutical composistion of claim 40, wherein the compound is



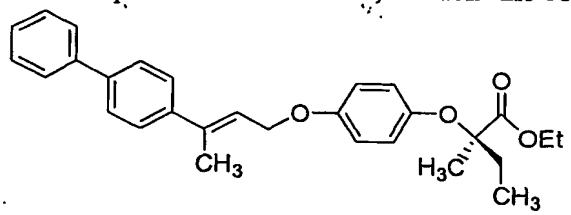
48. The pharmaceutical composistion of claim 40, wherein the compound is



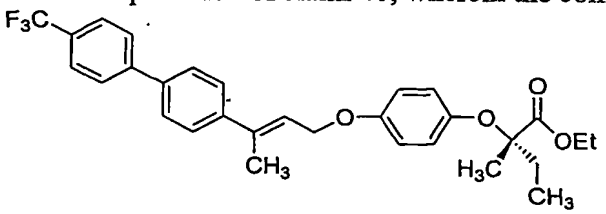
49. The pharmaceutical composistion of claim 40, wherein the compound is



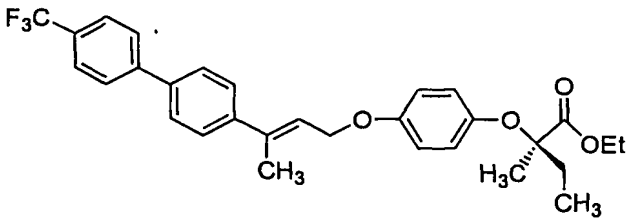
50. The pharmaceutical composistion of claim 40, wherein the compound is



51. The pharmaceutical composistion of claim 40, wherein the compound is



52. The pharmaceutical composistion of claim 40, wherein the compound is



53. The pharmaceutical composition as claimed in claim 40 in the form of a tablet, capsule, powder, syrup, solution or suspension.

54. A method for treating and/or preventing dyslipidemia comprising administering a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 to a patient in need thereof.

55. A method for treating and/or preventing diabetes caused by insulin resistance or impaired glucose tolerance comprising administering a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 to a patient in need thereof.

56. Use of a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 for treating and/or preventing dyslipidemia.

57. Use of a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 for treating and/or preventing diabetes caused by insulin resistance or impaired glucose tolerance.

58. A medicine for treating and/or preventing diabetes caused dyslipidemia comprising administering a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 to a patient in need thereof

59. A medicine for treating and/or preventing diabetes caused by insulin resistance or impaired glucose tolerance comprising administering a compound of formula (I) as defined in claim 1 or a pharmaceutical composition according to claim 40 to a patient in need thereof.